DOCUMENT RESUME

ED 186 347	SO 012 603

AUTHOR	Mitchell, Douglas E.: And Others
TITLE	Social Science Impact on Legislative Decision Making. A Study of Factors Affecting the Utilization of Social Research and Evaluation in Three State Legislatures. Final Report.
INSTITUTION	California Univ., Riverside.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C.
PUB DATE	Jun 79
GRANT	NIE-G-76-0104
NOTE	386p.
EDRS PRICE	MF01/PC16 Plus Postage.
DESCRIPTORS	Behavioral Science Research: Behavior Patterns: *Decision Making: Information Utilization: *Legislators: *Policy Formation: Political Influences: *Politics: Research Methodology: *Social Sciences: State Legislation: *Systems Analysis: Use Studies

ABSTRACT

This research report describes an analysis of the ways state legislative policy makers in Arizona, California, and Oregon engage in the process of turning political interests and pressures into public policies. The purpose is to provide insights into the overall processes of social science utilization within state legislatures, using a behavioral orientation. The report is presented in six chapters. Chapter I offers background information and an overview of the study. Chapter II explains the variations of decision-making behavior and social science utilization as occurring in four distinct stages. Chapter III examines three approaches to studying how decision making within the system is controlled, and chooses the role-orientation model as most useful for this study. Chapter IV reviews technical issues relating to the design, sampling, and methods of data collection and analysis, as well as an assessment of limitations on validity and reliability. Chapter V presents data analysis and findings in four areas: origins of legislative orientations, linkage between orientation and the stages of workflow, relationship between orientation and workflow involvement, and the impact of social science on the formation of legislative policies. Chapter VI identifies five conclusions and makes recommendations for the improvement of legislative operations, the improvement of social science utilization, and further legislative research. (CK)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED186347

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

FINAL REPORT

GRANT NO. NIE-G-76-0104

SOCIAL SCIENCE IMPACT ON LEGISLATIVE DECISION MAKING

A study of factors affecting the utilization
of social research and evaluation in three
state legislatures.

Prepared by:

Douglas E. Mitchell
University of California, Riverside
Principal Investigator

With:

Gary W. Badarak and Larry W. Criswell,
Research Assistants and Tedi K. Mitchell,
Research Associate

June, 1979

The research reported herein was performed pursuant to a grant with the National Institute of Education, U.S. Department of Health, Education and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official National Institute of Education position or policy.

U.S. DEPARTMENT OF

HEALTH, EDUCATION AND WELFARE

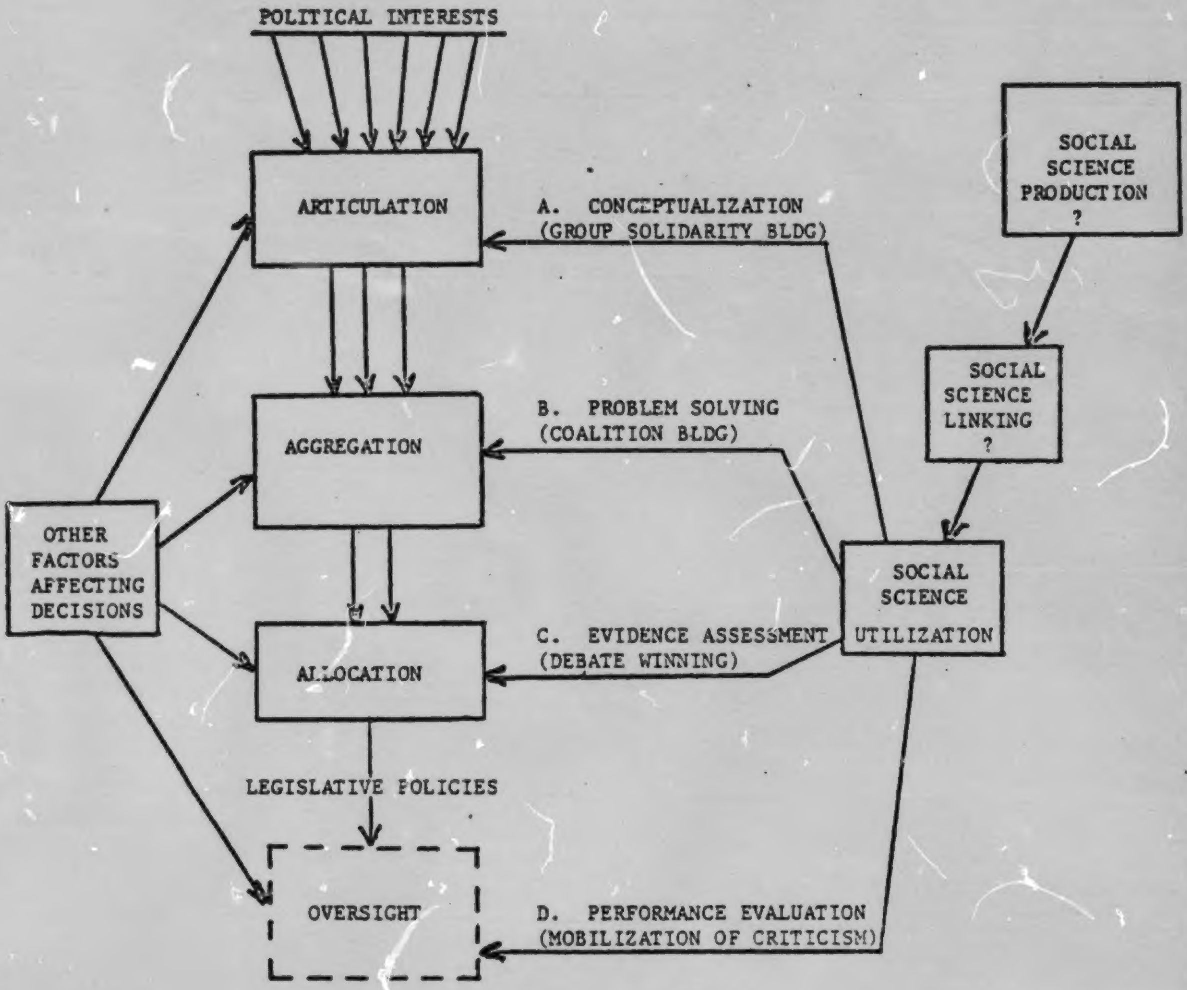
NATIONAL INSTITUTE OF EDUCATION

SO 012 603

JUN 9 1980

Figure X

THE INTELLECTUAL AND (SOCIAL) FUNCTIONS OF SOCIAL SCIENCE UTILIZATION WITHIN THE LEGISLATIVE POLICY WORKFLOW


POLITICAL INTERESTS
ARTICULATION
A. CONCEPTUALIZATION
(GROUP SOLIDARITY BLDG)
SOCIAL SCIENCE PRODUCTION ?
AGGREGATION
B. PROBLEM SOLVING
(COALITION BLDG)
SOCIAL SCIENCE LINKING ?
OTHER FACTORS AFFECTING DECISIONS
SOCIAL SCIENCE UTILIZATION
ALLOCATION
C. EVIDENCE ASSESSMENT
(DEBATE WINNING)
LEGISLATIVE POLICIES
OVERSIGHT
D. PERFORMANCE EVALUATION
(MOBILIZATION OF CRITICISM)

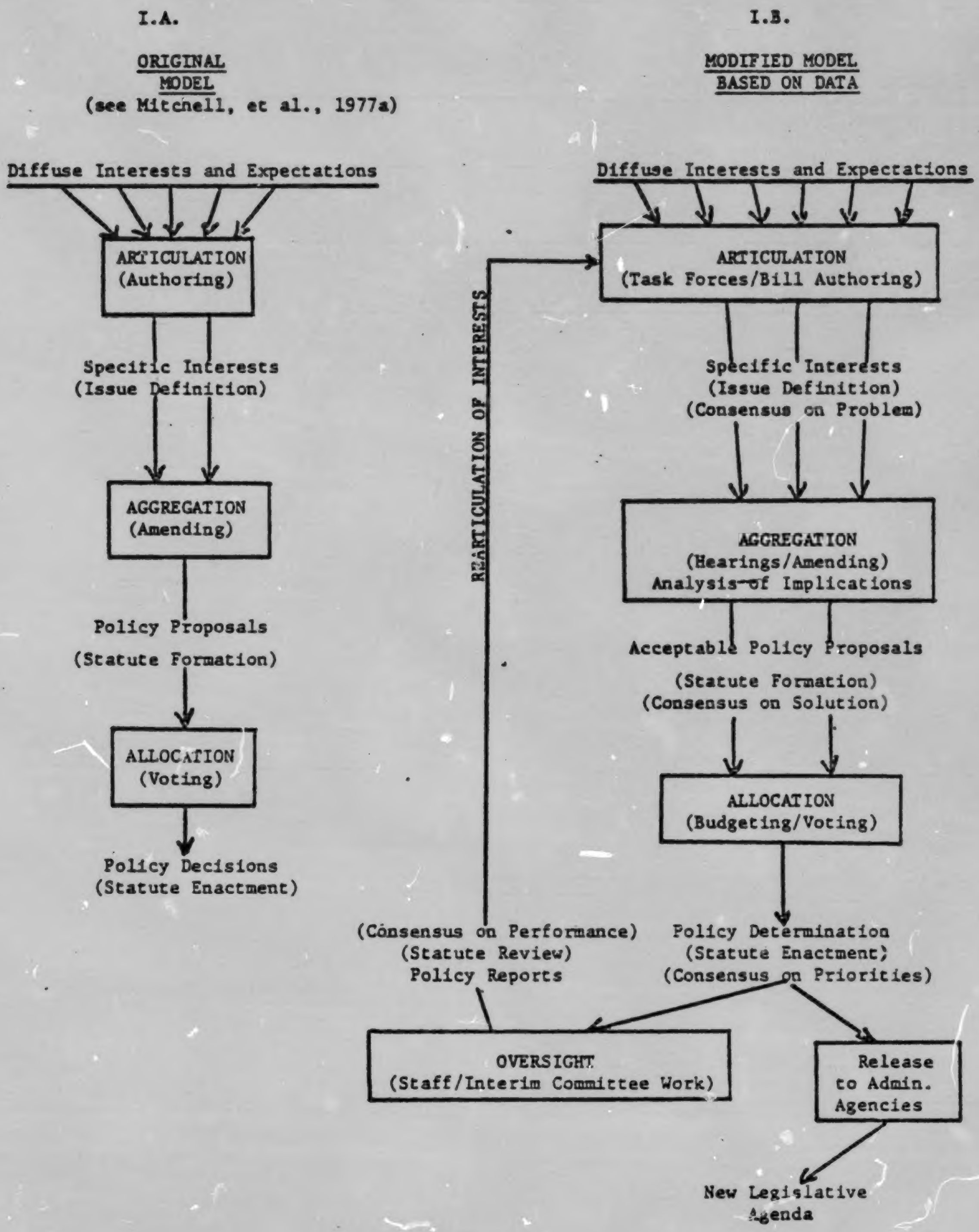
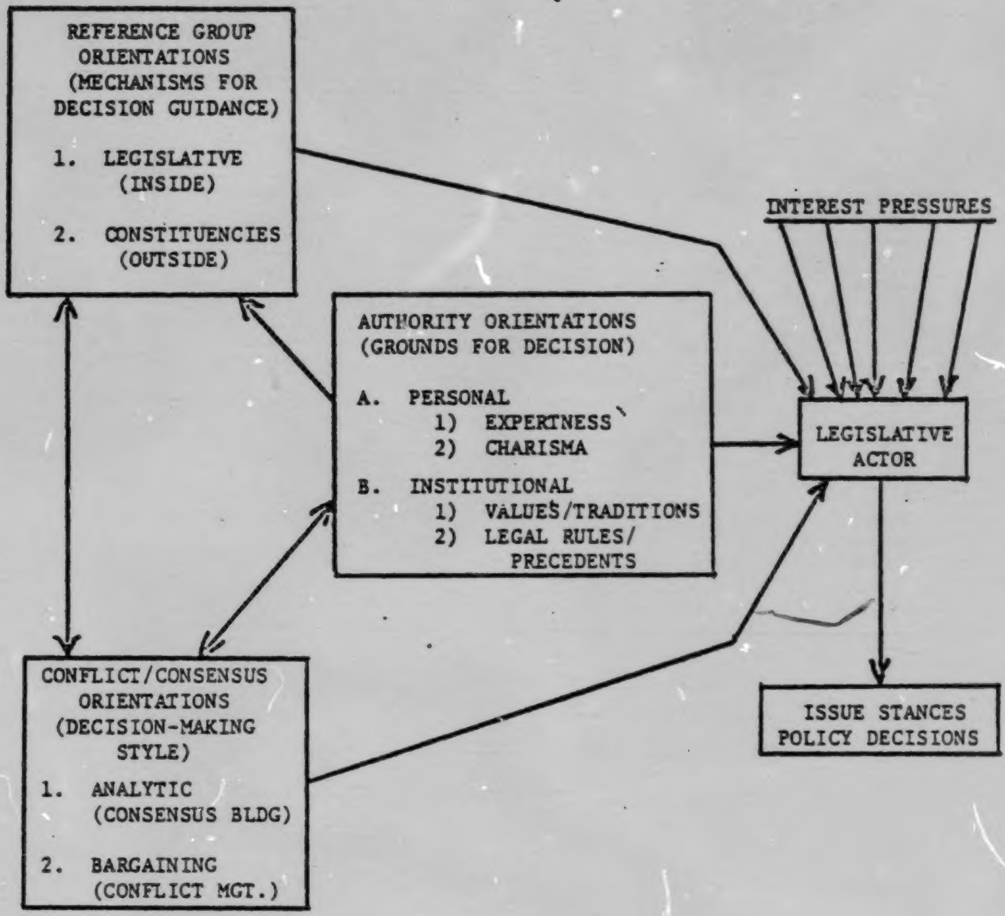


FIGURE I: STAGES IN THE LEGISLATIVE WORKFLOW

I.A.
ORIGINAL MODEL
(see Mitchell, et al., 1977a)
Diffuse Interests and Expectations
ARTICULATION (Authoring)
Specific Interests (Issue Definition)
AGGREGATION (Amending)
Policy Proposals
(Statute Formation)
ALLOCATION (Voting)
Policy Decisions (Statute Enactment)
I.B.
MODIFIED MODEL BASED ON DATA
Diffuse Interests and Expectations
ARTICULATION (Task Forces/Bill Authoring)
Specific Interests (Issue Definition) (Consensus on Problem)
AGGREGATION (Hearings/Amending) Analysis of Implications
Acceptable Policy Proposals
(Statute Formation) (Consensus on Solution)
ALLOCATION (Budgeting/Voting)
Policy Determination (Statute Enactment) (Consensus on Priorities)
REARTICULATION OF INTERESTS
(Consensus on Performance) (Statute Review) Policy Reports
OVERSIGHT (Staff/Interim Committee Work)
Release to Admin. Agencies
New Legislative Agenda

FIGURE II: FACTORS INFLUENCING LEGISLATOR ORIENTATIONS TOWARD POLICY DECISION-MAKING


REFERENCE GROUP ORIENTATIONS (MECHANISMS FOR DECISION GUIDANCE)
1. LEGISLATIVE (INSIDE)
2. CONSTITUENCIES (OUTSIDE)
INTEREST PRESSURES
AUTHORITY ORIENTATIONS (GROUNDS FOR DECISION)
A. PERSONAL
1) EXPERTNESS
2) CHARISMA
B. INSTITUTIONAL
1) VALUES/TRADITIONS
2) LEGAL RULES/ PRECEDENTS
LEGISLATIVE ACTOR
CONFLICT/CONSENSUS ORIENTATIONS (DECISION-MAKING STYLE)
1. ANALYTIC (CONSENSUS BLDG)
2. BARGAINING (CONFLICT MGT.)
ISSUE STANCES POLICY DECISIONS

Preface

This report is the culmination of more than three years of intensive work. It represents a comprehensive analysis of the ways in which legislative policy makers in three states engage in the complex process of turning political interests and pressures into public policies. Although the title of our original research proposal* implied a narrow focus on the processes of social science utilization within the development of educational policies related to basic skills, we recognized very early in our work that interpreting the relationship between social science and public policy can only be undertaken if one takes the broadest possible view of legislative decision-making. Thus our research and this report focus on the major elements in all state level legislative policy decision-making. While we focused our attention on education as a policy area, we believe that conclusions and recommendations from this research (see Chapter VI) will be of vital interest to policy makers, political scholars, social scientists and social science research sponsoring agencies whose interests cover a broad range of public policy issues. We believe, in other words, that our research provides critical insights into the overall processes of social science utilization within state legislatures. Legislative action in formulating education policy, which was the center of attention in our data gathering efforts, is sufficiently similar to that required for other types of social policy that the processes of science utilization described in this report reflect, we believe, the general nature of social science impact on all legislative policy decisions.

---

*"Improving Social Science Utilization in Legislative Policy-Making for Basic Skills Education. NIE-G-76-0104, Funded October, 1976.

For those interested in briefer summaries of our findings, four documents are available from the principal investigator which will provide abbreviated interpretations of various aspects of the theory and/or data utilized in this report. They are:

1. "Social Science Utilization in State Legislative Policy Making" a paper presented at the American Educational Research Association Meeting in Toronto, Canada, April 1978, summarizes the theoretical framework utilized in the research design, (21 pp.).

2. "State Legislative Politics: Findings from an NIE Study," in The AASA Professor, Vol. 2, No. 1, Winter 1979, pp. 4-8, a very brief summary of the primary findings regarding legislative decision-making.

3. "The Control of State Legislative Decision-Making," a paper presented at the Politics of Education Association meeting in San Francisco, California, April 1979, summarizes the data and conclusions regarding the state legislative decision-making processes, (34 pp.).

4. "Social Science Utilization in State Legislatures" (forthcoming) summarizes social science utilization aspects of the data and offers conclusions regarding how science utilization can be improved.

Two reports (Mitchell, et al., 1977a, 1977b), listed in the references to this report, were generated at the end of the first year's work on this research. One of these reports provides a more elaborate account of previous research on social science utilization and state legislative policy formation. The other discusses major characteristics of the three states utilized for this study and of the six education policy issues which were closely examined during our study. Copies of these reports are also available for the cost of reproduction from the principal investigator.

Acknowledgments

Completion of the research reported here required the collaboration and support of many different people. Because we asked our respondents to speak frankly and off-the-record, it is impossible to publicly acknowledge the tremendous contributions provided by key legislative policy actors in Arizona, California and Oregon. We are truly grateful, however, for the enthusiasm and openness with which the state legislators and other key actors with whom we spoke entered into our study.

There are, in addition to the members of the research team whose names are listed as co-authors of this report, several people who have made direct contributions to the quality and character of our work. We are particularly appreciative of the contributions made by Professor Laurence Iannaccone, University of California, Santa Barbara, who served as a consultant to the research team over the entire period of our research and offered numerous insights into the significance and meaning of our data. We also want to acknowledge the substantive contributions of Dr. Forest I. Harrison, California State University, San Francisco, who served as a co-investigator for the project during its first critical year and contributed greatly to its conceptual foundations.

In addition to the financial and personal support for our work provided by the National Institute of Education and the institutional support provided by the University of California, Riverside, we would like to express

our appreciation to the University of Illinois, Urbana, for several important contributions to our work. Through the generosity of the Office for the Analysis of State Educational Systems (Professor Fred S. Coombs, Director) and the Department of Administration, Higher, and Continuing Education (Professor Thomas Sergiovanni, Chairman), Dr. Mitchell was able to spend his sabbatical leave during the 1978-79 academic year at the University of Illinois, freed from teaching responsibilities and able to concentrate on interpreting the rich body of data gathered during this study. Moreover, two members of the Office for the Analysis of State Educational Systems staff contributed greatly to the vital tasks of turning draft manuscripts into this final report. Mrs. Pat Rowland typed and re-typed the report manuscript, and Mr. Timothy Reagan assisted with bibliographic, figure construction, and proofreading tasks.

Figure X

THE INTELLECTUAL AND (SOCIAL) FUNCTIONS OF SOCIAL SCIENCE UTILIZATION WITHIN THE LEGISLATIVE POLICY WORKFLOW

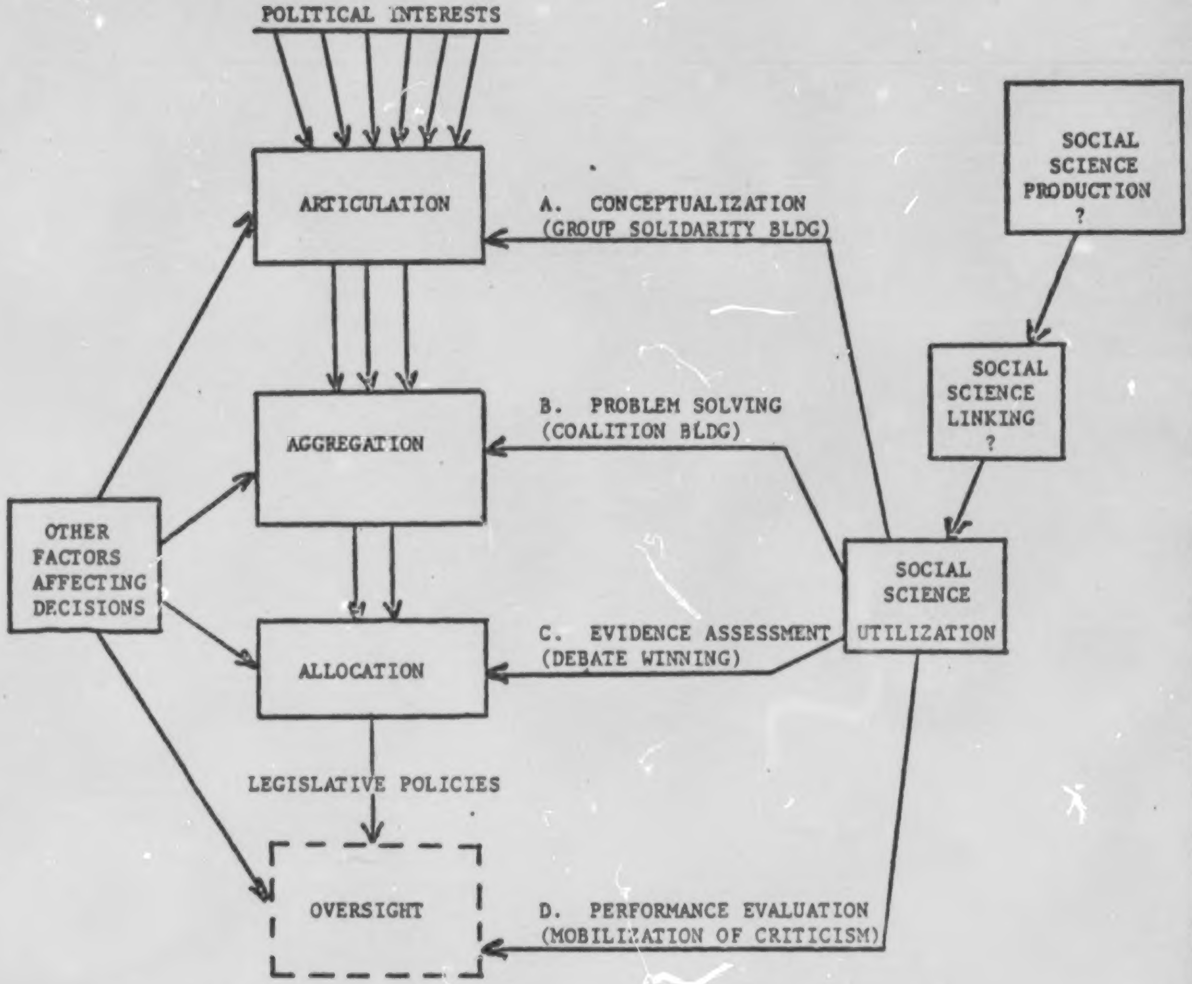

POLITICAL INTERESTS
ARTICULATION
AGGREGATION
ALLOCATION
LEGISLATIVE POLICIES
OVERSIGHT
OTHER FACTORS AFFECTING DECISIONS
A. CONCEPTUALIZATION (GROUP SOLIDARITY BLDG)
B. PROBLEM SOLVING (COALITION BLDG)
C. EVIDENCE ASSESSMENT (DEBATE WINNING)
D. PERFORMANCE EVALUATION (MOBILIZATION OF CRITICISM)
SOCIAL SCIENCE PRODUCTION ?
SOCIAL SCIENCE LINKING ?
SOCIAL SCIENCE UTILIZATION

FIGURE I: STAGES IN THE LEGISLATIVE WORKFLOW

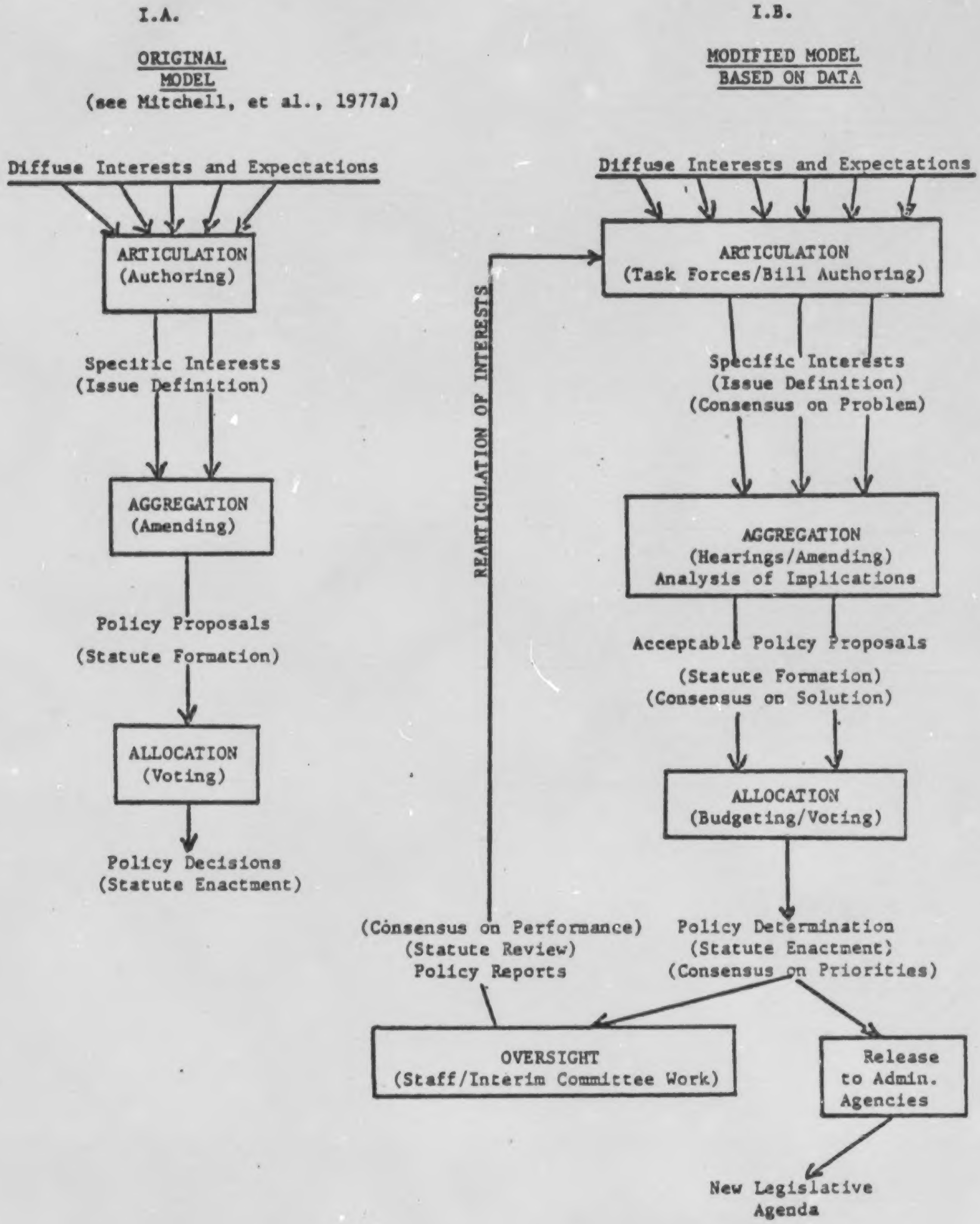

I.A.
ORIGINAL MODEL
(see Mitchell, et al., 1977a)
Diffuse Interests and Expectations
ARTICULATION (Authoring)
Specific Interests (Issue Definition)
AGGREGATION (Amending)
Policy Proposals
(Statute Formation)
ALLOCATION (Voting)
Policy Decisions (Statute Enactment)
I.B.
MODIFIED MODEL BASED ON DATA
Diffuse Interests and Expectations
ARTICULATION (Task Forces/Bill Authoring)
Specific Interests (Issue Definition) (Consensus on Problem)
AGGREGATION (Hearings/Amending) Analysis of Implications
Acceptable Policy Proposals
(Statute Formation) (Consensus on Solution)
ALLOCATION (Budgeting/Voting)
Policy Determination (Statute Enactment) (Consensus on Priorities)
OVERSIGHT (Staff/Interim Committee Work)
Release to Admin. Agencies
New Legislative Agenda
(Consensus on Performance) (Statute Review) Policy Reports
REARTICULATION OF INTERESTS

FIGURE II: FACTORS INFLUENCING LEGISLATOR ORIENTATIONS TOWARD POLICY DECISION-MAKING

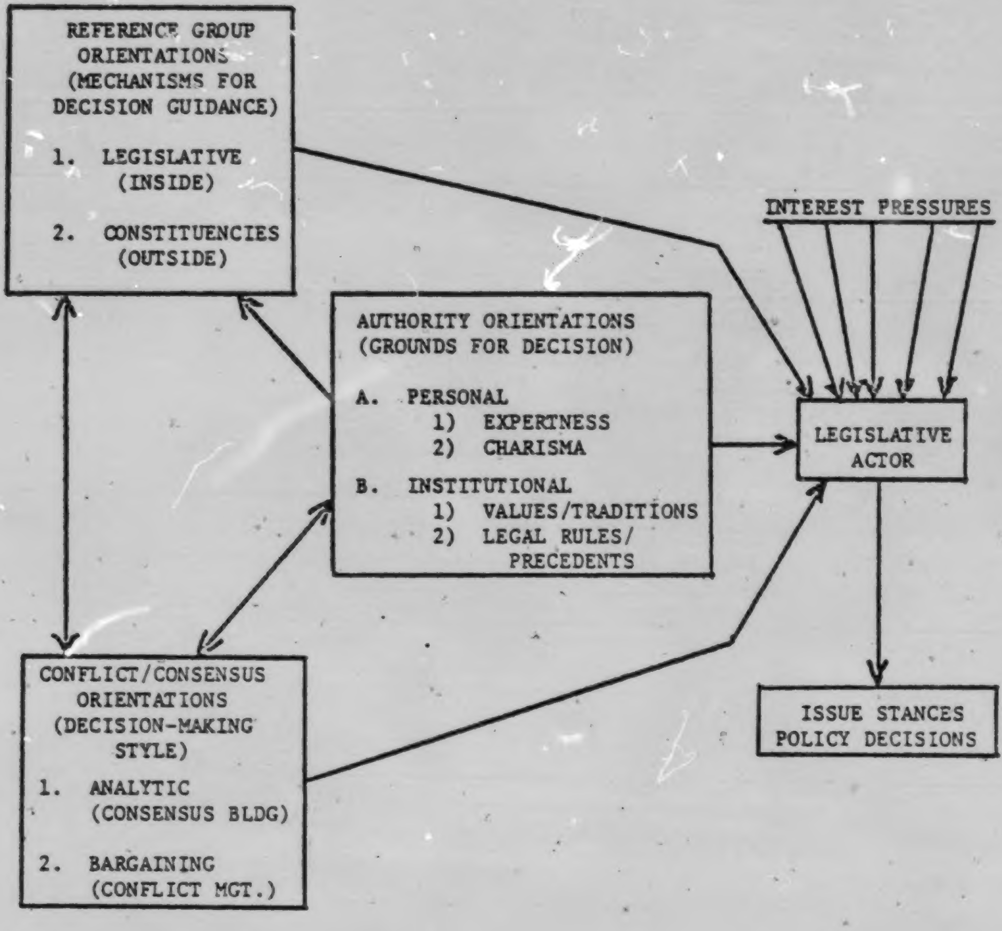

REFERENCE GROUP ORIENTATIONS (MECHANISMS FOR DECISION GUIDANCE)
1. LEGISLATIVE (INSIDE)
2. CONSTITUENCIES (OUTSIDE)
AUTHORITY ORIENTATIONS (GROUNDS FOR DECISION)
A. PERSONAL
1) EXPERTNESS
2) CHARISMA
B. INSTITUTIONAL
1) VALUES/TRADITIONS
2) LEGAL RULES/ PRECEDENTS
INTEREST PRESSURES
LEGISLATIVE ACTOR
ISSUE STANCES POLICY DECISIONS
CONFLICT/CONSENSUS ORIENTATIONS (DECISION-MAKING STYLE)
1. ANALYTIC (CONSENSUS BLDG)
2. BARGAINING (CONFLICT MGT.)

TABLE OF CONTENTS

PREFACE i

ACKNOWLEDGMENTS iv

CONTENTS vi
- List of Figures viii
- List of Charts viii
- List of Tables ix
- List of Appendices xi

CHAPTER I. BACKGROUND
- An Overview of Social Science Utilization and Legislative Decision-Making 1
- Decision-Making and Social Science Utilization 5
- Social Science Utilization and the Legislative Research Paradigms 19

CHAPTER II. THE LEGISLATIVE WORKFLOW 27
- The Workflow Stages 30
- Interest Articulation 32
- Interest Aggregation 47
- Interest Allocation 59
- Oversight of Legislative Interest 67

CHAPTER III. THE CONTROL OF INDIVIDUAL DECISION-MAKING BEHAVIOR 72
- Role Orientation Research 75
- The Orientational Frame of Reference 80
- Reference Group Orientations 84
- Analytic and Bargaining Decision Styles 87
- Authoritative Bases for Decision-Making 100

CHAPTER IV. RESEARCH DESIGN, METHODS, AND SAMPLE DESCRIPTION 112
- Development of the Study 112
- Design and Sampling for the Year II Study 115
- Instrumentation 123
- Statistical Description of the Respondents 132
- Cross-Tabulation of Biographic Variables 136

CHAPTER V. DATA ANALYSIS AND MAJOR FINDINGS 139
- A. Purposes and Methods of Data Analysis 139
- B. Legislative Role Orientations and Their Origins 152
- C. Orientation and the Legislative Workflow 198
- D. Orientation and Social Science Utilization 230

CHAPTER VI. CONCLUSIONS AND RECOMMENDATIONS 272
A. Conclusions Regarding Legislative Decision-Making 272
B. Recommendations for Improving Legislative Operations 283
C. Recommendations for Improving Social Science Utilization 288
D. Future Directions in Legislative Research 294

REFERENCES 297

APPENDICES 302

LIST OF FIGURES

		Following Page
FIGURE I.	STAGES IN THE LEGISLATIVE WORKFLOW	32
FIGURE II.	FACTORS INFLUENCING LEGISLATOR ORIENTATIONS TOWARD POLICY DECISION-MAKING	80
FIGURE III.	HYPOTHESIZED RELATIONSHIPS AMONG THE MAJOR THEORETICAL CONSTRUCTS CONNECTING LEGISLATIVE ROLE-ORIENTATIONS AND LEGISLATIVE WORKFLOW INVOLVEMENT WITH SOCIAL SCIENCE UTILIZATION	141
FIGURE IV.	DISCRIMINANT FUNCTION CENTROIDS FOR RESOURCE RATING SCALE SCORES, USING STATE OF RESIDENCE AS CRITERION	162
FIGURE V.	DISCRIMINANT FUNCTION CENTROIDS FOR RESOURCE RATING SCALE (RRS) SCORES, USING LEGISLATIVE WORK ROLE AS CRITERION FOR GROUPING RESPONDENTS	176
FIGURE VI.	DISCRIMINANT FUNCTION CENTROIDS FOR SEVEN LEGISLATIVE WORK ROLE FOR THE FOUR AUTHORITY MODALITY RRS SUB-SCALES	183
FIGURE VII.	LINE GRAPH DEPICTING MEAN SCORES ON INSIDE/ OUTSIDE REFERENCE GROUP ORIENTATIONS	186
FIGURE VIII.	LINE GRAPH DEPICTING MEAN SCORES ON ANALYSIS/ BARGAINING STYLE ORIENTATIONS	188
FIGURE IX.	DISCRIMINANT FUNCTION CENTROIDS FOR SEVEN LEGISLATIVE WORK ROLE GROUPS (4 MECHANISM FOR DECISION RRS SUB-SCALES)	192
FIGURE X.	THE INTELLECTUAL AND (SOCIAL) FUNCTIONS OF SOCIAL SCIENCE UTILIZATION WITHIN THE LEGISLATIVE POLICY WORKFLOW	271

LIST OF CHARTS

CHART A.	COMPARISONS AMONG THREE PARADIGMS FOR LEGISLATIVE RESEARCH	11
CHART B.	ALTERNATIVE APPROACHES TO THE ROLE OF LEGISLATOR	205

LIST OF TABLES

Following Page

TABLE 1. LEGISLATIVE DECISION MAKER SAMPLE DESCRIPTION AND RESPONSE RATES 120

TABLE 2. LEGISLATIVE DECISION-MAKING RESOURCE RATING SCALE (RRS): ITEMS BY SUB-SCALES 130

TABLE 3. DISTRIBUTION STATISTICS SELECTED DEMOGRAPHIC VARIABLES COMPLETE SAMPLE (n=114) AND COMPLETED ISSUE RESPONSES (n=177) 132

TABLE 4. CROSS TABULATIONS OF SELECTED DEMOGRAPHIC VARIABLES 136

TABLE 5. RESOURCE RATING SCALE (RRS) SUB-SCALE MEANS (STANDARD DEVIATIONS) 152

TABLE 6. CORRELATIONS AMONG RRS SUB-SCALES 156

TABLE 7. DIRECT DISCRIMINANT ANALYSIS OF RRS SUB-SCALES USING SELECTED DEMOGRAPHIC VARIABLES AS CRITERIA FOR GROUPING RESPONDENTS 160

TABLE 8. DIRECT DISCRIMINANT ANALYSIS OF RRS SUB-SCALES USING STATE AS THE CRITERION VARIABLE FOR GROUPING RESPONDENTS 162

TABLE 9. MULTIPLE REGRESSION OF RRS SUB-SCALES ON YEARS IN OFFICE FOR LEGISLATORS 165

TABLE 10A. DIRECT DISCRIMINANT ANALYSIS OF RESOURCE RATING SCALE SCORES USING LEGISLATIVE WORK ROLE AS CRITERION FOR GROUPING RESPONDENTS 167

TABLE 10B. DISCRIMINANT ANALYSIS OF AUTHORITY MODALITY RRS SUB-SCALES, USING LEGISLATIVE WORK ROLE AS CRITERION FOR GROUPING (COEFFICIENTS FROM DIRECT ANALYSIS: FUNCTION EVALUATION FROM STEPWISE ANALYSIS) 182

TABLE 10C. WORK ROLE GROUP MEANS AND ANALYSIS OF VARIANCE RESULTS FOR THE REFERENCE GROUP SUB-SCALES OF THE RRS 186

		Following Page
TABLE 10D.	WORK ROLE GROUP MEANS AND ANALYSIS OF VARIANCE RESULTS FOR THE DECISION STYLE SUB-SCALES OF THE RRS	188
TABLE 10E.	DIRECT DISCRIMINANT ANALYSIS OF MECHANISMS FOR DECISION RRS SUB-SCALES, USING LEGISLATIVE WORK ROLE AS CRITERION FOR GROUPING RESPONDENTS	190
TABLE 11.	THREE-WAY ANALYSIS OF VARIANCE FINDINGS FOR RRS SUB-SCALES, USING EDUCATION POLICY ISSUE, LEGISLATIVE WORK ROLE AND STATE AS FACTORS	193
TABLE 12.	STEPWISE DISCRIMINANT ANALYSIS OF RRS SUB-SCALES USING ETHNICITY AS THE CRITERION VARIABLE FOR GROUPING RESPONDENTS	196

18

APPENDICES

APPENDIX A: COVER LETTER AND PROJECT ABSTRACT SENT TO YEAR I SAMPLE.

APPENDIX B: COVER LETTER FOR YEAR II PARTICIPANTS NOT INTERVIEWED DURING YEAR I.

APPENDIX C: COVER LETTER FOR YEAR II PARTICIPANTS PREVIOUSLY INTERVIEWED DURING YEAR I.

APPENDIX D: SUMMARY OF YEAR I WORK ENCLOSED WITH REQUEST FOR YEAR II INTERVIEWS

APPENDIX E: YEAR II INTERVIEW SCHEDULE AND NOTE FORM

APPENDIX F: BIOGRAPHICAL DATA FORM

APPENDIX G: LEGISLATIVE DECISION-MAKING RESOURCE RATING SCALE

CHAPTER I: BACKGROUND

AN OVERVIEW OF SOCIAL SCIENCE UTILIZATION AND LEGISLATIVE DECISION-MAKING

Introduction

A research proposal funded by the National Institute of Education in October of 1976 described the character and central purposes of a 25-month inquiry into the impact of social science research and evaluation findings on the formation of state level legislature policy relating to public education. This report provides a detailed account of the conduct of that research, including: 1) a description of its design and methods, 2) a delineation of its major findings, 3) a discussion of the theoretical framework used to conceptualize the research and to interpret its findings, and 4) the presentation of a series of policy recommendations intended to assist state government officials, research sponsors, and social research and evaluation professionals to improve the utility of social research and to enhance its utilization within the state legislative policy making process.

The magnitude and significance of the research being reported here is indicated by two facts. First, no comparable body of data on the work orientations or decision making behavior of state legislative policy makers has been generated by any research project since the publication of the seminal work on The Legislative System undertaken by Wahlke, et al., (1962) more than fifteen years ago. Second, although there have been five recent survey studies of comparable scope devoted to the study of social science utilization within processes of policy making, (see Caplan, et al., 1975 or Caplan, 1976; Knorr, 1975; Rich, 1976; Thomas, 1975; and Weiss, 1976), as well as a much larger number of inquiries into social science impact on policy implementation, not one of these surveys examines utilization within the legislative branch of government. The data gathered for this research, therefore, contribute significantly to an understanding of how state legislatures function as political institutions as well as to an interpretation of the nature and extent of social science impact on their operations.

In fact, as the remainder of this report will demonstrate, an adequate interpretation of social science utilization by state legislatures is only possible if we first examine the character of the work performed by various legislative actors, and then conceptualize that work in terms which highlight the characteristic policy contributions made by social research and/or evaluation. Typical approaches used in most recent studies of state legislatures have not found social science to be an important factor in their behavior. As we will discuss more fully below, however, this failure is more conceptual than empirical in that legislative behavior has been studied principally in ways which are likely to obscure rather than illuminate the contributions of social science findings.

In order to set the findings and recommendations developed during the course of our research into an appropriate context the first chapter of this report will review briefly prior research on both state legislative decision-making and social science utilization. We hasten to point out, however, that a detailed review of this literature was generated during the first year of this research project and is presented in an earlier report (see, Mitchell, et al., 1977b). That earlier report presents a detailed analysis of prior research and contains a substantial bibliography which will not be reproduced here. Readers interested in a fuller account of the findings or methods used in prior research should consult the earlier document.

About This Report

Two basic ideas will be developed in the remainder of this chapter. First, we will identify policy decision-making as the appropriate central concept for studying social science utilization by state legislatures. While there are a number of other important functions performed by state legislatures, and there are many non-decision-making activities which take up the time and attention of individual legislators, we found that social science research and evaluation findings are best interpreted in terms of their contribution to the processes and/or the outcomes of legislative decision making activities.

Second, after noting that three distinctive theoretical frameworks have been applied to the study of state legislatures, we will argue that social science utilization is best studied from within a behavioral (as distinguished from a structural or process) orientation. While it is clearly possible to use structural and/or process theoretical perspectives, we will indicate briefly why these other approaches are less promising and less likely to produce needed insight into what factors most dramatically affect either the likelihood or the consequences of social science utilization.

In Chapter II, we will develop the concept of a legislative decision-making *workflow*, consisting of four distinct stages, and argue that both decision-making behavior and social science utilization can be expected to vary significantly from one workflow stage to the next. We will suggest that decision-making behavior must be interpreted in terms of the distinctive activities associated with each of these four workflow stages, and will describe the various types of action which shape legislative issues as they move from one workflow stage to the next.

Chapter III is devoted to an examination of various approaches to the explanation of how the decision making behavior of the key actors within the legislative system are controlled. We will suggest that, of the three major schools of thought on this subject found in prior research, the *role-orientation* model of individual decision making behavior is most useful in interpreting the impact of social science on legislative policy outcomes. We will note that *influence* and *constraint* theories of decision making have each proven valuable for some purposes, but that neither of these approaches is likely to provide an adequate account of social science utilization or impact. In this chapter we will also describe in some detail three fundamental dimensions of all legislative role-orientations: *reference group* orientations, *bargaining/analysis style* orientations, and *authority* orientations.

Chapter IV will review technical issues related to the design, sampling, methods of data collection and analysis and an assessment of limitations on the validity and reliability of our study.

Chapter V presents major findings regarding legislative role-orientations and social science utilization within our three state sample, and Chapter VI discusses the implications of these findings for legislative policy makers, research sponsoring agencies and social scientists.

DECISION-MAKING AND SOCIAL SCIENCE UTILIZATION

Two historical facts about the relationship between social science and public policy formation should be kept firmly in mind as we set out to interpret the utility or impact of social research on governmental policy. First, we need to remember that legislatures were in business for a long time before there was any social science. Hence, whatever role social science plays in the legislative process it is clearly an optional not an essential feature of the action. Moreover, the fact that social science is a relatively new enterprise (developed only in the twentieth century--largely since the period of the Great Depression) means that the traditional processes of state legislative policy making (developed more than a hundred years earlier) may neither facilitate potential contributions from social science nor permit legislative actors to recognize easily when or how they could--or perhaps already do--utilize research findings in the conduct of their work.

This situation underscores the timeliness of our research, but it also reminds us that a careful consideration of the principal factors governing legislative behavior will be needed before development of a research design and data analysis procedures.

The second historical factor influencing our study is the existence of a dramatic shift in the character of governmental support for social science research and evaluation activities which occurred during the 1960's. As pointed out in our earlier technical report (see Mitchell, et al., 1977b, Chapter I), federal involvement in social research shifted during the 1960's from a policy of "support for science" to one emphasizing the importance of getting scientific energies and resources focused on the development of "solutions to public problems." This shift in federal policy was characterized by at least six broad changes in the relationship between governmental policy makers and the social scientists who conduct research and evaluation studies. First, there was a substantial shift of research activities away from what have been called "basic" or "pure" research aimed at purely intellectual goals, such as testing theories or describing and explaining human behavior to "applied" or "policy" focused research which is intended to answer immediate practical questions and produce tangible social benefits. Second, there was a fairly dramatic increase in the use of contracts rather than grants as mechanisms for distributing federal research dollars. This use of the contract mechanism emphasizes expectations that the research will generate "deliverables" which are useful to the sponsoring agency. Third, associated with the shift to contract research was a shift away from universities to private research corporations as the preferred agencies for expenditure of increased federal research funds. Presumably, this shift was motivated by a belief that the entrepreneural corporations would more adequately respond to increased demands for "useful" results. Fourth, there was a rapid increase in the amount of federal money being spent on scientific evaluation studies focused on specific programs. This increase was among the earliest signs of a shift in federal policy, having been given formal expression during the Kennedy Administration. Fifth, there was a virtual explosion in the number of books,monographs and articles published on the contributions which social science can or should make to public policy. Finally, several highly publicized federal initiatives were undertaken to either increase scientific productivity and relevance (by such programs as the National Science Foundation's RANN program or the National Institutes of Health's "War on Cancer") or to turn social programs into social science experiments (such as the Operation Headstart "Planned Variations" program or the Nixon Administration's experiment with "income maintenance" as an alternative to welfare payments).

Beyond these external indications of a shift in the working relationship between social science and public policy making there is ample evidence that both federal and state level legislators embrace, support, and frequently initiate these changes. Not only have mandates for scientific program evaluation been increasingly included in new program statutes, Congress and most states have also created new staff structures--formally located within the legislative branch--charged with the accumulation and analysis of scientific information. Typically these new units are staffed by individuals with advanced social science training and thus they have the capacity to critically assess the relevance of available research for issues being decided and to explore the utility of social science findings to the members of the legislatures.

This new appreciation of, and demand for, social research within the legislatures underscores the importance of our study, but it also complicates it. Intense demand for legislative utilization does not necessarily mean that either legislators or their staffs know when or how to effectively utilize research. The perceptions of most state legislators regarding the value of social research and of the new legislative staff groups responsible for assisting in its utilization are deeply affected by recent experiences with specific applications and specific staff specialists. Only with the passage of time and the accumulation of concrete experiences over a broad range of specific opportunities for utilization can we expect legislators to develop needed practical wisdom about the possible contributions of social science to legislative policy and/or the limitations and dangers inherent in overreliance on scientific policy guidance. Kenneth Boulding suggests that the time needed for the development of this practical wisdom may be quite long. He says,

> I suspect, indeed that the story of the impact of the social sciences will not be written for five hundred years. It will take at least that long for the implications of present knowledge to work themselves out. (Boulding, 1966:19, emphasis added)

However long the development of this practical wisdom may require it is clearly not yet available. As a result, science utilization tends to be buffeted about by an unhealthy conflict between enthusiastic zealots who believe that scientific policy decisions are invariably superior and resistive skeptics who see scientific guidance as sterile or inadequate and public policy as basically a matter of expressing public values rather than making scientific choices. In this climate, we recognized the need for research to carefully distinguish between conflicting _ideological commitments_ regarding science utilization and _actual legislative experiences_ which illuminate its possibilities and limits.

For these reasons, then, our research project began by scrutinizing the literature on state legislature processes and on social science utilization in an effort to build a theoretical frame of reference which would describe legislative policy formulation in a way that clearly identifies social science research and evaluation as _specific_, yet _optional_, factors in the process.

Decision-making as a Central Concept

Choice or _decision-making_ emerged from our review as the critical concept for interpreting science utilization in legislatures. Although, as Patterson (1974:167) has aptly put it:

> It is not easy to capture in a summary way the kaleidoscopic pattern of legislative policy activity.

The process is clearly one of choosing directions, selecting strategies and setting priorities for dealing with perceived public problems. Francis (1967:52-53) describes the decision-making of legislatures in this way:

> Legislators choose among a wide range of alternatives. In some states these choices lead to generous social welfare programs, appropriation, the choice is one of degree; it is rarely a simple "yes" or "no" decision...nothing is ever fully resolved. The same problems creep up again and again. And each time the legislature meets, it must decide "more" or "less" on a host of familiar measures.

In the next few pages we will briefly review previous research on state legislatures in order to delineate fully this process of legislative decision making, to explain why other researchers have not found social science to be an important factor in explaining legislative activity, and to lay the groundwork for our approach to gathering and analyzing data on how legislators engage in the business of policy making.

Approaches to the Study of Legislative Decision-Making

As suggested by Wahlke (1975), there are three contrasting approaches to the study of state legislatures to be found in the voluminous research literature on this subject. In part, the distinctions among these three research paradigms are historical accidents, reflecting successive frameworks for political research design and analysis that have emerged over the past half century or so. More importantly, however, the three approaches can be distinguished on the basis of divergent orientations toward five important questions. They differ with regard to how they answer the questions: 1) What is the function of the legislature as a political institution? 2) What is the primary unit of analysis to be studied in legislative research? 3) What are the various independent (or causal) variables to be examined in relation to legislative performance? 4) What are the characteristic dependent (or explained) variables which are seen as important indicators of how the legislative system is performing? And 5) How are the motivation and decision-making actions of various legislative actors to be conceptualized?

Wahlke (1975:2-8) identifies these three research paradigms as: institutional, process oriented, and behavioral. He points out that the institutional approach to legislative research is the oldest. It formed the basis for most analyses and commentary on legislative activity prior to the twentieth century, and was utilized for empirical research design in the earliest efforts to subject actual legislative behavior to systematic field investigation (see, e.g., Luce, 1924). The legislative process paradigm emerged during the 1930's as political scientists sought to develop research designs which would be more sensitive to the dynamics of political pressure and would help to explain how structurally similar legislatures responded differently to environmental changes within the larger political community. The behavioral approach (not to be confused with behaviorism in psychology) was not effectively utilized until the 1950's. This model was originally developed to help political researchers delineate the nature and mechanisms by which influence over legislators and their activities is exercised by powerful individuals, by community "elite," "establishment" or "power structure" groups, or through other important social relationships.

Chart A summarizes the critical distinctions among these three theoretical paradigms along the five basic dimensions listed above. As suggested by the terms in the first row of the chart, the institutional approach

CHART A

COMPARISONS AMONG THREE PARADIGMS FOR LEGISLATIVE RESEARCH

	INSTITUTIONAL	PROCESS	BEHAVIORAL
1. Assumed function of the Legislature	Regulation of the Political Community A structure of government	Authoritative Allocation of Values A Pressure Response System	Arena for Legislator Interaction and Decision-Making An Influence System
2. Identity of Primary Units of Analysis	The Legislature as a Formal Organization	Legislating as the transformation of inputs into outputs	Legislators (and other actors) as interacting individuals and/or groups
3. Nature of Independent (causal) variables	* Structural sub-units (e.g., committees, staffs, etc.) * Rules for action (e.g., deadlines, roll call voting, etc.)	* External forces (e.g., economic conditions, urban/rural conflicts * Pressure Groups (e.g., * parties, constituencies, lobbyists,	* Social/demographic factors (e.g., sex, age, occup., religion, etc.) * Personal/psychological factors (e.g., role expectations, goals, attitudes, orientations)
4. Nature of Dependent (explained) variables	* Legislative operations comparatively evaluated * Legislative operations normatively evaluated	* Roll Call Voting * Budget and (rarely) statute adoptions	* Specific role behaviors * Orientation toward decisions or actions
5. Assumptions about the nature of legislator motivation and decision-making	Rational actors sensitive to rules and formal structures	Responsive actors sensitive to power and resources	Committed actors sensitive to social norms and ideological goals

to research characteristically sees the legislature as a political institution whose primary function is the regulation of the larger political community through the enactment of statutes which structure and constrain the behavior of citizens. The realization of this primary legislative function is seen to depend upon the creation of legislative structures, the formation of specific rules for legislative activity, and the orderly application of those rules to frame, debate, modify and eventually adopt the legislation needed for a just and orderly society.

Process researchers, by contrast, see the primary function of the legislature in terms of its power to, in David Easton's (1965) provocative phrase authoritatively allocate values among the various members of a society. By shifting from the concept of legislative regulation to that of allocation of values, process researchers draw attention to the fact that legislative decisions control to a very substantial degree every citizen's access to scarce and valued goods and services. One important result of this shift in perspective is that our attention is then easily drawn to the issue of legislative representation. If legislators are controlling, Who Gets What, When, How (Lasswell, 1936), then the question of whether the members of the legislature genuinely represent all legitimate societal interests is easily recognized as a matter of vital concern. The contrasting emphasis within institutional research on the legislature as an agency creating "the rules of the game" rather than a vehicle for directly determining who will become winners and losers in the societal distribution (or redistribution) of valued goods and services makes the question of representation seem less crucial. After all, getting one's fair share of society's economic or social values may still depend to a large extent on private initiative and personal action if legislative rules are impartial and fairly enforced. From the institutional perspective rules and regulations are interpreted largely in terms of their overall impact on all individuals and are frequently seen as impartially aimed primarily at the achievement of the general welfare. Process research, which sees legislative action primarily from an allocative perspective, however, interprets the results of legislative decisions in terms of differential effects which impact directly on personal and private welfare. Legislative contributions to the larger public good tends to be given only secondary importance in allocative theory. Hence, the process paradigm is quick to recognize that determining who has a legitimate right to exercise control over individual and group welfare, and what factors control how these legitimate representatives actually make their decisions, are questions of utmost importance in determining whether the legislature is functioning properly.

As shown in the third column of Chart A, the behavioral research paradigm shifts attention away from the function of the legislature for the larger society, and emphasizes the fact that the legislature functions as an arena for interaction among the various legislative actors whose participation in this system of interaction leads to the decisions which the legislature finally takes. It is quite understandable that this third research paradigm is the most recent and that it arose only after several institutional and legislative process studies had been successfully undertaken. Analysis of the system of interactions which control policy decisions within the legislature itself only seems important if various aspects of the ability of the legislature to either adequately regulate the political community (as institutional research reveals) or legitimately and authoritatively allocate important values to all citizens (as process research reveals) have been documented. The behavioral researcher is primarily interested in who the key legislative actors really are, why they act the way they do, and what decisions result from the actions they take. As interesting as these questions may be from a purely scientific point of view, however, they remain only esoteric and abstract if we have not already connected legislative decision processes with the adequacy or legitimacy of the public policies which finally emerge from their operations.

As suggested by the concepts presented in the second and third rows of Chart A, each of the three major strands of legislative research has its own definition of the primary unit of analysis to be studied, and of the fundamental variables which describe it. Institutional research focuses on the legislature as a formal organizational structure. When examining legislative decisions researchers taking this perspective identify the various structural sub-units within the legislature (e.g., committees, leadership offices, staff units, caucuses, floor sessions, etc.) and the formal rules and procedures which create these structural units and control their interactions as the primary variables to be observed.

Process research, by contrast, has a more dynamic primary unit of analysis. Process researchers see the act of legislating as central. They emphasize the need to look at characteristic pre-conditions for an act of legislative decision making and to assess legislative "outputs" in terms of the variations in these pre-conditions or "inputs." Process researchers may emphasize the dynamic pre-conditions found within the legislature (such as party coalitions, lobbyist activities, expressions of political ideology, staff activities, etc.) or those which are external to the legislature (such as statewide economic conditions, urbanization, electoral competition, political participation, etc.).

Researchers using a behavioral paradigm see the legislative actor as the primary unit of analysis, and seek to identify the various factors which account for individual or aggregated group actions. The behavioral researcher may emphasize social and demographic factors (such as occupational experience, religion, political party or ideology, socioeconomic status, etc.) or psychological variables (such as attitudes, values or commitments, levels of activity, need for power, perceptions of others' beliefs, orientation toward role or reference groups, etc.) as the variables which serve to direct and control the individual actor's decision making behavior.

In addition to differences in the variables identified as the basic causes of legislative decision making, each of the three paradigms has its own view of what to look for when assessing the outcomes or results of legislative decision making. The terms presented in the fourth row of Chart A indicate the nature of the differences in these dependent or explainable aspects of legislative action.

Institutional researchers tend not to be much interested in explaining the content of legislative decisions. Instead, they tend to focus on determining what effects various changes in structure and procedure have on the capacity of the legislature to reach those decisions efficiently and legitimately. Note that there are two distinct sub-groupings of institutional research. One sub-group--representing the oldest expressions of serious scholarly inquiry into legislative governance--use a normative ideal legislature (derived either from constitutional/legal analysis or philosophical/ideological analysis) as the template against which to compare the performance of the specific legislatures being studied in order to draw conclusions regarding their efficacy and legitimacy as political bodies. A second group of institutional studies--more recent in development--emphasize the value of cross comparison between legislatures in order to establish the effects of a particular structure or procedure. Unfortunately comparative legislative research is plagued by both high cost and serious difficulties in identifying functional equivalencies between different structures or procedures occurring under different political, social, or historical circumstances. As a result, comparative legislative research has thus far not been able to realize its full potential for illuminating the nature of legislative decision making.

Process research is generally interested in the specific content of legislative decision outputs, and usually defines these outputs in terms of either the appropriation of funds for specific legislative programs or the roll call voting records of the members of the legislature. Occasionally, as in the case of Wirt's (1977) recent work, a process researcher will define output in terms of differences in non-fiscal policies, but such process studies are rare.

Process researchers interested in appropriations or non-fiscal policy outputs generally seek data on aggregate statewide social and political variables such as per capita income, political party membership, political culture or ideology measures, etc., while those who study role call voting seek data on the personal characteristics of legislators or the character of their constituencies.

As suggested previously, behaviorally oriented research seeks to explain individual behavior. This individual behavior may include roll call voting records, but research developed from this paradigm tends to include a much broader range of legislator behavior involving such things as a legislator's stand on various issues, style of legislative activity, responsiveness to constituents or other legislative actors, orientations toward the responsibilities of office, etc. One group of behavioral researchers have concentrated on the concept of legislative role expectations as the most powerful explanatory variable. This strand of research, following the seminal work of Wahlke, et al. (1962) has given prominence to the concepts of "trustee," "delegate" and "politico" styles of representation. The other dimensions of legislative role behavior mapped by Wahlke and his associates in their early study have not proven to be as interesting to recent behavioral researchers or as enduring and powerful as sources of insight into legislator behavior. A second group of research studies' drawn from the behavioral paradigm have emphasized the fact that legislators' behavior is dependent upon their orientations toward personal and/or political goals and opportunities (or constraints and limitations) which are encountered within the legislature. This group of studies, rather than emphasizing legislators' responses to the expectations of others, emphasizes the importance to all legislative actors of pursuing personal goals and interests and developing specific bases or "grounds" for making the legislative decisions in which they participate.

As indicated by the terms in the fifth row of Chart A, each legislative research paradigm makes certain assumptions about the character, motives, and decision-making processes utilized by individual legislators. Institutional research, for example, assumes that individual legislators are more or less rational actors operating intelligently within the formal procedures and structures of the legislature to analyze public needs, deliberate with other legislators over how to respond, argue for the interests of their own constituents and persuade or compromise their way into a final decision.

From the process perspective, individual legislators are the focal point of group and individual interests or pressures. As a complex person, the individual legislator actually disappears from sight in process research and is conceptualized as a kind of pressure sensitive lever or point of access to the decision-making process. The sensitivity of each leverage point varies, of course, depending on the personal characteristics of the legislator and the nature of the pressures being exerted. In the final analysis, however, process research treats any decision taken by a legislator as an action which can be explained by the discovery of the appropriate pressure variables originating in the social and political environment within which he/she is acting.

Behavioral research utilizes a rich textured conception of individual legislative actors and seeks ways to explain their choice making behavior on the basis of the ways in which they accept and "take up residence" within the legislative role structure or utilize the legislature as an arena within which to express and pursue personal intentions, goals or purposes. For the behavioral paradigm, beliefs, perceptions and commitments operate as powerful intervening variables linking the individual legislator to the legislative action system in a particular way, enhancing the power of some sources of influence and insulating or isolating him/her from other influences.

SOCIAL SCIENCE UTILIZATION AND THE LEGISLATIVE RESEARCH PARADIGMS

It would be possible, of course, to apply any one of the three legislative research paradigms just discussed to the study of social science utilization. However, each paradigm would focus attention on a different aspect of the utilization question, would lead us to gather quite different sorts of data, and would call for different ways of assessing the significance of our findings. If we had unlimited time and resources it would be useful to undertake investigation of social science influence using all three perspectives simultaneously. Such a venture was, however, quite impossible on the limited resources available for this project and would have caused us to sacrifice needed depth of understanding on central questions for a superficial and inadequate treatment of many secondary issues. We chose the behavioral paradigm as the most promising source of guidance for our research design. Our reasons for adopting this approach will be more readily understood if we briefly describe the primary research thrust implicit in each of the other perspectives.

Institutional Utilization

From an institutional perspective, science utilization is identified as an activity characteristic of specific organizational units involved in making legislative decisions. One might, for example, look directly at the behavior of individual legislators or their personal staffs as they interact with each other and as they develop various constituent, lobbyist or friendship links to see whether any of these relationships are characterized by explicit attention to social science. The record of previous research and of our own exploratory field work, however, suggested that no systematic social science utilization would be discovered here. We could--with more promise of success--concentrate on the activities of various offices of legislative research, budget analysis, and on the legislative committee staff consultants which are found in increasing numbers in every state capitol in order to determine the extent to which the activities of these legislative units involve conducting, interpreting, analyzing or summarizing social science research. Such an approach would have enabled us to document some of the apparently substantial variations between states and between staff units in their capacity or inclination to organize their work around social science concepts or findings. While such an analysis would contribute much to an understanding of legislative staff activities, it would have left us unable to link those activities to the ultimate decisions being taken by the legislature itself, since we could find no satisfactory body of research examining the relationship between these types of staff activities and ultimate legislative decisions. Consequently, we concluded that studying the institutionalization of social science capability within staff structures would not tell us very much about the legislative impact of that capability. We needed a research design which would illuminate how, when and why social science findings are actually called upon to support or direct legislative policy making. Once utilization itself can be described and predicted, studies of the institutional capabilities which support or inhibit utilization, will, no doubt, become a vital concern for policy makers or researchers interested in the development of an effective social science utilization policy. For our own work, however, the institutional paradigm threatened to divert attention and resources away from the study of utilization itself by failing to distinguish between utilization capacity and actual usage.

Process Utilization

Viewed from a process perspective, inquiry into social science utilization becomes a question of whether there is a demonstrable connection between the availability of specific social research or evaluation findings and identifiable legislative decision-making outcomes. While this problem is conceptually easy to understand it presents serious difficulties for field research. The matter of "demonstrating a connection" between research products and legislative decisions is a difficult but manageable research design problem. However, the matter of defining social science "availability" is more complicated. While it is intuitively meaningful to argue that such statewide social or economic variables as median family income, degree of urbanization, average level of educational attainment, or political party registration are directly related to the behavior of both citizens and elected political officials (even without knowing what specific mechanisms connect these variables to the control of political behavior), it is not at all obvious that the social research findings filed in technical reports or published in esoteric professional journals are really available to the legislature at all. This question of availability, of course, lies behind the currently widespread concern over the dissemination or diffusion of research findings throughout political and economic communities. Although it might appear appropriate to confine our attention to those social research findings which have been successfully disseminated and are therefore clearly available to state legislatures as a matter of conscious awareness, this strategy would invalidate our design in two ways. First, it imposes on the definition of social science a constraint not typically used when studying other process variables. Process researchers do not, for example, typically ask whether legislative decision makers are aware of variations in social or political indicators such as constituent income or relative urbanization being used to predict voting or other legislative decision making behavior.

Indeed, it may well be that the power of some important factors controlling legislative decisions lies in their unconscious influence over behavior; a power which would be substantially reduced if the decision makers began consciously to pay attention to them. If this is so, then using conscious awareness as part of the definition of social science availability could lead us to dramatically underestimate its actual influence.

The second distortion in research design which arises if we use conscious awareness as part of the operational meaning of social science availability is more practical. It is very difficult to know exactly what is meant by "awareness" of social science research. Of course, the boundary conditions are reasonably obvious. We could all agree that there is awareness if legislative actors can recount the methods, findings, and theoretical frameworks used to interpret specific research studies. And there is certainly no awareness if legislative actors do not see a decision as requiring any knowledge of social facts or any theory of social behavior in order to be adequately resolved. In the real world of legislative action, however, neither of these conditions is frequently encountered. Legislators typically feel that their decisions are based on substantial but limited knowledge of relevant facts and on a broad but incomplete understanding of the social system. They rarely are able to recall more than the most abbreviated summary of any specific research studies, however. Moreover, it is quite possible that merely knowing that serious research has been undertaken on a particular problem may be at least as effective in controlling a legislator's decision making as either knowing the specific results of that research or understanding what methodological considerations limit the value of the findings. Hence the quality of a legislator's awareness is clearly at least as important as the extent or level of that awareness if we are to adequately interpret the impact of social science on legislative outputs.

Once we recognize the importance of the qualitative as well as the quantitative characteristics of a legislator's awareness of and response to social research it becomes obvious that a behavioral rather than a process research design will be more appropriate and effective.

Behavioral Utilization

For the behavioralist, legislative policy is a result of decision-making activities undertaken by various legislative actors whose actions are to be explained in terms of their distinctive orientations toward the demands of legislative work and the nature of legislative issues. Social science utilization, from this perspective, is seen as a question of whether (and if so, how) social research findings actually affect the ways in which a legislative actor orients toward, and responds to, the decisions to be made. Thus, the behavioral approach helpfully directs our attention to the optional character of social science influence over legislation by attributing legislative decisions to the deliberate and intentional activities of particular individuals and by conceptualizing the control of this behavior in terms of their unique expectations and perceptions. As a result of this attention to the attitudes and orientations of individual decision makers, the behavioral approach to research has a potential for explaining not only how social science is utilized, but why it is not utilized more regularly. By examining what factors compete with science as bases for making or accepting a decision behavioral research promises to illuminate the limits and problems of utilization as well as the mechanisms and process by which it occurs.

Two major stumbling blocks must be overcome in order to apply the behavioral research paradigm to the study of social science utilization. The first arises because, as previous behavioral research has amply demonstrated, legislative decision making is a fairly complex process involving not one single action but a series of activities involving repeated encounters with the same legislative proposals and issues and frequently extending over many months or even years. This means that our research must be based on a framework for interpreting legislative decision-making behavior which appropriately delineates the sequence of decision contexts or workflow stages through which legislation passes as it is transformed from an initial demand or proposal into a final statute. An initial formulation of this legislative workflow system, and a revised conceptual framework resulting from analysis of our field data, are presented in Chapter II.

The second problem confronting the application of a behavioral research design to the problem of social science utilization arises from the failure of prior research on legislatures to provide us with a convincing or consistent set of basic variables for explaining how the decision making behavior of individual legislators is guided or controlled. Among the best comprehensive studies one can find examples of behavioral research which emphasizes the power of normative role expectations arising from constituents, political party leaders, lobbyists, other legislators, and a variety of other groups or individuals (see, e.g., Wahlke, et al., 1962 or Kirkpatrick, 1974). However, there are other comprehensive research studies which emphasize instead the extent to which control is exerted by personal motives, attitudes, or intentions arising from within legislative actors themselves as a result of their social history and experience (see, e.g., Barber, 1965, or Diamond, 1977). Moreover, assessment of the large number and great variety of factors which have received at least some attention by researchers seeking to locate potential sources of control on individual behavior is greatly complicated by an almost total lack of clear theoretical frameworks for giving them coherence or meaning. On the basis of prior research alone it is impossible to know where to concentrate our efforts in trying to study how social research and evaluation findings might be related to other factors which guide and direct individual decision making behavior. In order to cope with this problem we found it necessary to overlay our analysis of the legislative workflow stages with a rudimentary theory of individual decision making behavior which identifies potentially important control factors in a systematic way. Hence the presentation and discussion of legislative workflow stages in Chapter II is followed by an analysis of the parameters of individual decision making in Chapter III.

CHAPTER II

THE LEGISLATIVE WORKFLOW

Introduction

Two important concepts are needed in order to adequately describe the flow of legislation through the typical legislature. These two concepts--interest and issue--are basic to the lexicon of any political analysis and describe central elements in all legislative work. The concept of political interest is important because it reflects the fact that all legislative policies originate in demands for action not in questions of truth, knowledge, wisdom, efficiency or even cost effectiveness. The state legislator lives in a world characterized by demands to "do something" to solve people's problems. The system of political interests creating the demands which confront every public policy maker may be diffuse or explicit, they may emphasize either the problems people want solved or some particular solution that they desire, and they may be compatible and mutually supportive, divergent and competing, or directly contradictory. Those who make the demands may do so on the basis of their own needs and rights, in the name of some public interest, or perhaps even on the basis of an altruistic interest in the welfare of others. Above all, however, the legislator confronts a situation where pressures to act are diverse, incessant, intense, simultaneous, difficult to clearly identify and encountered in ways that make it difficult to distinguish legitimate from illegitimate interests. From this boiling caldron of desires, interests and demands, the legislative actor must isolate some concerns as the basis for action (neglecting or rejecting the others) and must define and formulate these interests in ways that enable the legislature to not only be responsive to important social interests but also appear responsive to interests which are broadly recognized as legitimate.

When attending to the demands of various political interests legislatures create and then resolve (or avoid) decision making issues. Issues arise whenever interests are formulated in ways that permit legislatures to give direct, "either/or," responses to them. Demands, desires, and interests become legislative issues only when the urge to do something is accompanied by specification of what can be done. It was C. Wright Mills (1956) who aptly described politics as the business of "turning personal troubles into public issues." Legislatures, more than any other political institutions in our society are charged with the responsibility of determining which of the problems troubling citizens can and should become the focus of governmental action. Legislative debates are second only to the rhetoric of political campaigns in the frequency and pungency with which matters of previously private or personal interest are re-cast as issues for public action. Once re-cast, these issues form the basis for the legislative decision-making process.

Recent research on legislative decision making has clearly documented the existence of systematic variations in the way individual legislators, and legislatures taken as aggregate units, respond to different types of issues as they are being decided. Patterson (1962), LeBlanc (1969) and Deckard (1976), among others, have identified the importance of legislators' party affiliations, the characteristics of their districts, and the margin of their electoral victories as factors which influence their voting on some issues differently than on others. Jones (1973) found that the sensitivity of legislators to what they believe to be the explicit preferences of their constituents depends significantly on the nature of the issues involved. Francis (1962) and Huckshorn (1965) are examples of research demonstrating that, because some legislators come to be seen within the legislature itself as experts on particular policy issues, the patterns of influence among the members of the legislature vary from one issue area to another. In terms of the aggregate outputs of a legislature, Grumm (1970) has shown that the effects of such ecological factors as population expansion, economic affluence, and urbanization affect policy outputs in some areas differently than in others. And Brady and Murray (1975) demonstrated that the effects of reapportionment (and probably of other legislative reforms) affect some issue areas more than others.

In sum, a well developed body of legislative research has repeatedly found that factors affecting legislative decisions frequently affect some issue areas in ways quite different from others. Utilization of social science research and evaluation findings may well follow this same general role, hence it was important to base our own study on a design which would encompass several different issues. Therefore, on the strength of governors' budget documents, education code indices, newspaper reports, categories developed for a study of state education codes by the Lawyers Committee for Civil Rights Under Law (see Lawyers Committee, 1975), and preliminary interviews during the first year of our research we identified six issue areas for study. These issues, developed in some detail in a second technical report issued at the end of Year I (see Mitchell, et al., 1977a) were:

1. School Finance
2. Special Education
3. Personnel Policies (especially for Certificated Personnel)
4. Categorical Programs
5. Basic Skills/Basic Education
6. Political reform or restructuring (governance).

The Workflow Stages

The characteristic workflow within a state legislature is created by the interaction between persistent political interests and the formulation of particular political issues. Legislative decisions are always decisions about issues--about how they are to be defined, how important they are, how they might be resolved, and how they are related to or affected by other issues. By the same token, every legislative decision represents an embodiment, denial, or disregard of important political interests. Consequently there is a constant struggle within the legislative process to clarify interests, sharpen the definition of issues and assess the relationship between one and the other.

Although the process of interaction between interests and issues is an endless one in which new interests and new issues are constantly emerging, legislative work on any particular issue involves a sequence of fairly distinct stages, each characterized by a qualitatively different type of legislative activity. It is appropriate, therefore, to conceptualize legislative decision making in terms of this sequence of decision stages and it is important to explore the nature of social science utilization within each stage separately.

Figure 1 depicts graphically the basic stages through which legislative issues pass as they move from original political interests, through the formulation of specific proposals for governmental action, to the adoption of specific public policies. As indicated in the figure, our conceptualization of the basic legislative workflow stages was significantly elaborated and refined as we moved from the initial research design formulated during the first year of our research into data analysis and interpretation at the end of Year II. In describing the workflow stages presented in Figure 1 we will refer in some detail to the descriptions of decision-making provided by 160 key actors interviewed in the states of Arizona, California and Oregon. Although utilizing field data at this point to clarify the nature of the decision-making workflow in state legislatures may seem a bit premature in that it anticipates a discussion of research methodology, data gathering procedures, and analysis techniques to be presented in Chapter IV, we feel that a clear conceptualization of each stage in the legislative workflow is of paramount importance. Readers who wish to review and evaluate the methodological foundations of our research before examining any of the data should turn to Chapter IV now, and then pick up the discussion of our theoretical framework and background at this point.

Interest Articulation

As suggested in our earlier reports, and extensively documented in our field data, legislative decision-making begins only as diffuse or incoherent interests get expressed in ways which enable them to be seen as issues to which a "yes" or a "no"; a "more" or a "less"; answer could be given. Almond and Powell (1966) recognized the crucial significance of this process of sorting out conflicting and diffuse political interests within the development of legislative policy. They called this process interest *articulation* in order to underscore the importance of the expressive as well as the intellectual aspects of the process. David Easton (1965) recognized the same process, but he emphasized the importance of political "gatekeepers," individuals who play the key role at this stage of channelling some interests *into* the policy system while turning others away. Cobb and Elder (1972) provide another important insight into the articulation of interests when they point out that political decision-making depends upon the development of effective "condensation symbols" which express political interests in ways which not only articulate a call for action by government but also serve to mobilize support and/or opposition among political leaders and their constituencies.

FIGURE I: STAGES IN THE LEGISLATIVE WORKFLOW

I.A.

ORIGINAL MODEL
(see Mitchell, et al., 1977a)

Diffuse Interests and Expectations

ARTICULATION
(Authoring)

Specific Interests
(Issue Definition)

AGGREGATION
(Amending)

Policy Proposals

(Statute Formation)

ALLOCATION
(Voting)

Policy Decisions
(Statute Enactment)

I.B.

MODIFIED MODEL
BASED ON DATA

Diffuse Interests and Expectations

ARTICULATION
(Task Forces/Bill Authoring)

Specific Interests
(Issue Definition)
(Consensus on Problem)

AGGREGATION
(Hearings/Amending)
Analysis of Implications

Acceptable Policy Proposals

(Statute Formation)
(Consensus on Solution)

ALLOCATION
(Budgeting/Voting)

Policy Determination
(Statute Enactment)
(Consensus on Priorities)

(Consensus on Performance)
(Statute Review)
Policy Reports

OVERSIGHT
(Staff/Interim Committee Work)

Release
to Admin.
Agencies

New Legislative
Agenda

REARTICULATION OF INTERESTS

Within the legislature itself this articulation/gatekeeping/condensation symbol generating process culminates in the authoring of bills and resolutions.

This authoring of specific bills is the first formal stage in the flow of legislation toward its eventual enactment into law. As we have been suggesting, however, behind the process of bill authorship there exists a complex set of legislative activities. Initiative in the formulation of a bill may come from an executive agency, a member of the governor's policy staff, a lobbyist or special interest group, an individual legislator or even some member(s) of the legislative staff. This initiative may result from long and painstaking study and deliberation about a problem, from an immediate need to respond to court decisions or federal policy changes, from an acute sense of social or political crisis, from a desire to capitalize on political opportunity, from a strong desire for practical program improvement, or even from a frivolous whim. Who initiates the articulation of any particular interest and what has motivated their actions are frequently seen by others to be as much a part of "the issue" to be resolved as are the substantive contents or the fiscal implications of a bill itself.

Articulation as Seen by Legislative Actors Themselves

Within our field data the process of articulation is evidenced in a number of ways. We talked with individual legislators about when and why they introduced legislation. We noted that many bills are routinely submitted by the various state regulatory agencies. Of these bills, one legislator said, "We have a lot of housekeeping bills, things that are requested by the department. Each of our departments comes over with a long laundry list of bills that they want passed or code sections they want changed" [Calif, Legis.] *. Local school districts frequently articulate specific pieces of legislation. These bills are usually aimed at requesting waivers or securing exemptions because circumstances temporarily prevent their conforming to existing legislation. Special interest groups also submit specific legislation. An Arizona lobbyist identified the typical circumstances under which interest groups write legislation when he said, "We have some of our own legislative goals and if it's a specific goal, coming from our delegate assembly or our executive committee, we will seek introduction of a bill."

When the legislation to be introduced is fairly complex or seeks substantial changes in the status quo the defining of issues and articulation of proposals for new policy becomes more complicated. One attempt to develop such a significant change was described by an Oregon legislator who indicated that many lawmakers in that state have been hearing strongly worded complaints that, "We are wasting education resources on the frills." However, this legislator goes on, it is difficult to discern whether or not there is general public agreement with this complaint. And, even if there is agreement, it is hard to tell whether it would be possible to "narrow the range of activities that the state is supporting financially by defining (and funding) some components of the educational system that no one--or at least fewer--people

---

*Respondents are identified by state and work role only to protect their anonymity. All quotes are taken from tape recorded interviews.

would disagree with." In an effort to probe public opinion and define fully the legislative issue, this legislator began by spending, "probably thirty hours talking with individual legislators" about their perceptions of the problem. The primary outcome of these discussions was that, "there seemed to have developed a consensus that: if we could define more clearly what it is the state should be supporting and do a better job of (funding) that" the result would provide the basis for a major new educational finance package. In an effort to develop that consensus the legislative committee on which this legislator serves undertook a series of public hearings at several locations across the state. They soon discovered, however, that both in the field and within the legislature itself no agreeable solution could be articulated. Despite intense interest citizens and legislators were unable to define a basic "educational core" for state support. "Some folks feel that the hard sciences and music, for example, aren't part of that core" with the result that , "we just couldn't agree on three or six or ten class offerings that would comprise the core curriculum."

Another example of an unsuccessful attempt to articulate a complex policy issue is found in Oregon's effort to deal with the "back to basics" movement. In this case the legislators undertook to draft specific legislation before they held public hearings on the issue. Taking a draft bill out into the field for public hearings, the committee was greeted with intense and frequently cynical challenges to the legitimacy of their work. As one superintendent put it, "I want to 'congratulate' you for taking on this kind of controversial issue. If you pursue this issue you'll do as much for education as teacher tenure and collective bargaining have." The committee was told that "curricular issues are local issues," and that "we will take our chances on our local school boards" regarding "what's provided in our classrooms." Hence what started out as an effort to articulate an apparently straight forward issue so as to give legislative expression to intense public interest ended in a challenge to the legitimacy of the legislature itself.

These negative examples help to illuminate how legislators confront the problem of issue articulation. They highlight the fact that articulation _focuses_ political energies and determines whether or not a legislature _can_ deal with important problems successfully. Although many successfully articulated issues will never lead to meaningful public policies, no policy can be developed until adequate articulation has taken place.

Frequently, we found, successful articulation of an issue required that primary responsibility be taken by individuals who are not actually members of the legislature itself. For example, a state wide advisory committee or task force may be used to define problems and articulate possible solutions. In 1977, at the urging of one assemblyman, the California legislature spawned interim public hearings concerning public school staff development which confirmed that there were serious problems that needed attention. This assemblyman then "convened a statewide Advisory Committee on Staff Development made up of school board members, administrators, parents, representatives of parents, teachers, other school staff and post-secondary education" (Calif, staff) and was able to get a "lot of input on staff development." Public hearings, input from the advisory committee, and information gleaned from social science research enabled this legislator to articulate staff development legislation which could be recognized as responsive to a pressing problem and therefore gain widespread support.

Another approach to articulation of an issue is represented in the development of California's Early Childhood Education program. When Wilson Riles, California's Superintendent of Public Instruction, campaigned for election, one of the planks in his campaign platform was concerned with the remediation approach used in education. He questioned the value of remediation at the upper levels of the educational system and suggested that time, energy and finances should be more heavily invested during the earlier learning years. He based his argument "on the insight and knowledge he had gained working in the field" and "on research which stated that 50% of a child's potential is formed by age 8," according to a member of the California Assembly Education Committee. While no specific program of legislation was presented before his election, Riles' decisive victory was seen as a vote of approval on this issue and thus as legitimation for calling together a task force to work on developing a master plan that could be "packaged" legislatively. As described by one member of the group, "He formed a task force of about 35 people to write a master plan for early childhood education in the state." The task force included "PTA representatives, architects, union representatives, child growth development specialists, principal representatives--a broadly representative group." Task force members brought with them their years of experience in the field combined with some knowledge of research findings regarding the effect of schooling on child growth and development. Said the task force member, "We were given the responsibility of writing a master plan to bring about reform for the earliest ages. We were told to write our 'druthers'...what as visionaries we would dream for the children of California. We submitted a document that got national and international exposure." Then "We submitted the document to the State Department which wrote the master plan into proposed legislation, which put the dreams of the task force into language that they thought had a chance of flying politically."

Notice that in this case the articulation process had two district phases. When Superintendent Riles was seeking input from his task force, he urged them to disregard any aspects of the issue articulation process specifically conditioned by the current legislative situation or other "political realities" and to concentrate instead exclusively on "pure" public interests in the education of children. Only after the public interest was fully articulated did the political liaison staff within the State Department of Education begin adjusting this interest to various constraints within the legislative decision making process. As a result, however, the initial task force produced only a "plan" which was not yet cast in bill form. The second articulation phase--which led to a fully drafted bill--involved bridging the gap between what the task force saw as the public interest and what the State Department staff saw as concrete governmental actions which could be taken in order to realize that interest.

On many important issues, legislative or executive agency staff members and certain key legislators (considered experts or specialists in a particular educational policy making area) take the lead in issue articulation. As illustrated by the development of recent school finance reforms in California, they usually begin by meeting together to discuss a particular educational problem in order to see if a solution can be articulated. In response to the landmark school finance decision (Serrano vs. Priest) handed down by the California Supreme Court in 1971, key legislators and staff members, representing legislative and executive units, "met on a number of occasions in both public and private sessions trying to put our thoughts together...trying to put together a package that was politically saleable as well as one that would meet the court's mandate." (California, Legislator). In these meetings they were able to "pull together the synthesis of what had been tried in previous legislation" and were able to remember "what the contentions were five years ago on this provision or that provision and so forth." The concept of a statewide property tax to achieve equity was put aside "even though it was a very mathematically clean way of achieving equalization" because all previous legislative attempts "to get enough votes for it" had met with failure.

In contrast to the Early Childhood case described above, articulation of school finance issues typically concentrates on the political "realities" which will control final passage rather than the public interest which motivates legislative demands. Both of these illustrations, however, highlight the fact that the articulation process is a transitional stage within the legislative workflow. Articulation, if it is to be successful, must connect concern with the nature of public interest to the need for a politically "saleable" definition of the issue. Some participants in this process are clearly more concerned with problems to be solved while others are more concerned with subsequent stages in the legislative decision-making process. The latter group tends to emphasize the need to anticipate and accommodate factors influencing the fate of the decision once it has been fully articulated.

Occasionally concern for the difficulties in getting an issue resolved within the legislature leads to the creation of joint legislative committees in order to get broad based involvement in analysis of identified problems or articulation of needed legislation. The legislative leadership in California, in response to teacher certification problems and other difficulties in dealing with the State Department of Education, established a joint committee which held preliminary hearings attended by "those people who would be affected, school board members and teachers, the Department of Education bureaucrats." (California, staff) The committee chair was also "authorized to hire a staff person" whose primary tasks would be "to research the alternatives and work with the fiscal committee staffs of both houses, the Legislative Analyst's office and Department of Finance" so as to draft in legal form a bill which the joint committee would find both "practical and possible." In reviewing the work of joint legislative committees, we noted that sometimes the legislature utilizes the creation of such special committees primarily to legitimate the work of particular staff members whose concerns have attracted the attention of the leadership.

Sometimes, in the absence of clearly articulated proposals, the Education Committee may itself articulate education legislation. We found that this happened more frequently in Arizona and Oregon than in California--apparently because the lack of staff and the less professionalized legislatures in these states make belated identification of important issues more likely. Articulation by the Education committee itself is particularly likely when there is a need to respond to new federal mandates. For example, as a result of the passage of Public Law 94-142, the Oregon House Education Committee assigned to its administrative assistant the responsibility of articulating appropriate legislation to enable Oregon to comply with federally mandated special education requirements and to continue to be eligible for the funding needed to carry on the state's special education program.

As legislative responsibility has increased and the nature of many legislative problems have become more complex, legislative staffs have also increased. These new staff specialists have often been given the task of drafting important pieces of legislation, particularly, when the issues are long standing and complex. In serving this articulation function, the staff members are expected to be aware of social science research findings and technical data, to be knowledgeable about previous legislative efforts concerning the issue under consideration, to be competent in articulating legislation in the necessary "legalese" to conform with existing law and, when the nature of the solution requires complicated public policies, to have the technical expertise required to identify workable and cost effective approaches to the problem.

Staff responsibility for handling the relation between substantive policy and legal technicalities was illustrated by one California legislator who said, "I'm carrying a bill in education. It took three years to develop it and what happened is essentially that the staff went through the entire education code and picked out all of those reports that school districts have to give to the Department of Education and then, with the computer people, to find out which of them are being used anymore. This gave me a list of all those things required by the code that the school districts are still having to comply with--but nobody ever uses for any kind of decision making and so I'm carrying a bill to repeal those sections of the code." Staff involvement in the area of school finance is illustrated by a California lobbyist who said, "School finance is so complex--taking almost full time and dedication to understand 'foundation,' 'revenue limits,' etc," that when a new law was to be written, "representatives of Education Committee staffs of both houses, fiscal committee staffs of both houses, the legislative analyst's office staff and the Department of Finance staff all worked together." A staff member involved in the development of California's A.B. 65 (1977)--a major finance reform bill--commented that "after three or four, perhaps ten drafts, the bill was drafted in legalese and was introduced." All of these drafts were done by staffers, not by either legislators or lobbyists as has historically been the case. In another example of staff impact on articulation, the governor and the legislative leadership in the state of Oregon, responding to the need to revise the formula for public school funding, appointed a legislative-executive staff task force and gave them the responsibility of exploring school finance possibilities and bringing back to the legislature recommendations that could be acted upon. That staff group explored various principles to be incorporated in the legislation (e.g., equity funding, a growth factor, etc.), examined alternatives for trying to deal with those principles, and discussed what level of priority should be placed on schools within the total state budget. They consulted with various segments of the educational community and with legislators who expressed an interest in educational policy making. As a result, they felt they were aware of, and attuned to, those aspects of the school finance problem which would be "most attractive politically." When they finished their work they had articulated for the legislature "a specific recommendation both on a tax base and on a level and formula for funding." (Oregon, staff.)

The legislative leadership in Arizona also called upon staff members to formulate a workable school finance legislation. In 1974, responding to a lower court mandate concerning school financing, and aware of the financial, legal and political complexities of this issue, Arizona legislators scheduled a special session of the legislature to deal with that one issue. In preparation for the special session key staff people were assigned the responsibility of exploring school finance possibilities and articulating their findings in bill form. Legislative leaders appointed a joint legislative committee which they expected to merely adopt and legitimate the work of the staff rather than undertake their own analysis and articulation of the issue. In the opinion of one Arizona legislator, the leadership sought to rely on staff rather than legislators for articulation because, "school finance is such a complex issue to understand, much less to try and do something about, that at some point in time...an informal decision made that; look, if we try to get all these people involved (the joint committee members), we'll never get the problem solved. Therefore, we'll go out, solve the problem, and then try to convince them that this is the way to go." In other words that it would be, "the easier of the two routes" to accept the staff proposal rather than develop their own bill.

The staff did the assigned task but when their work was presented to the joint committee it was rejected. As one legislator said "we actually started from zero after we went into (the special legislative) session which was unfortunate because the preliminary work should have led up to a smooth session." In this legislator's view, because the "members, of the joint committee believed that they were going to delve into the background, the statistics and the other requirements to begin to develop a (finance) program," but "were not brought into the picture until the material had been developed by the staff and the bills had already been designed and drafted in essence " they were angry and resisted all staff suggestions. To some people "it was a slap in the face as if they were not adequate to the job." Moreover, in the eyes of some committee members, the staff members had been politically compromised by the business community. As one legislator said "the utilities, the mines, and the railroads helped write the bill." The existing animosity between educational and business interests caused some committee members to reject any proposal to which business may have contributed. As a result, what began as an efficiency move to speed up the articulation process ended in disappointment, and "As it turned out, we started over once we got in session because of this total refusal to cooperate and it was a total waste of time and everybody's energies up to that point."

In comparing the successful staff articulation of school finance legislation in Oregon with this failure in Arizona, we noted that the legitimacy of professional staff members' activities is a delicate and vital factor. Staff articulation is easily destroyed by mistakes on the part of leaders, by obvious influence from special interest groups, or by a lack of skill and tact on the part of the staff members themselves.

Before leaving our field data, we should highlight one other important vehicle for legislative articulation. Under extraordinary conditions either the legislature or the executive branch of government may appoint a "blue ribbon" committee or commission to study particular issues and to formulate legislation as a result of their work. California used such a special committee on educational reform, for example. And, as result of Proposition 13 passed by the California electorate in June 1978, the governor appointed a special Commission on governmental reform, headed by A. Alan Post, the highly respected former Legislative Analyst, to identify appropriate responses to this dramatic new situation and formulate needed legislation.

To Summarize

Our data suggest that the successful articulation of political interests, which culminates in the introduction of either a single bill or a legislative package, has three important consequences for the legislative decision making process. First, articulation enables the legislature to identify the specific interests which are being affected by their decisions. As these interests are explicitly identified it becomes possible to know who could be recruited to support the proposals and which groups or individuals are likely to be opposed. Secondly, adequate articulation provides for clear issue definition, making it possible for legislators to know what sort of action is being requested and what is at stake in supporting or opposing it. Clarity of issue definition permits the legislators to evaluate a proposal on the basis of some conception of its merits rather than simply assessing it on the basis of its supporters or opponents. The third outcome of a successful articulation process is the creation of a consensus on the definition of the social problems toward which legislative action can be appropriately and legitimately directed. It is this consensus on problem definition which separates the articulation stage from subsequent stages in the decision making workflow. As legislative proposals pass through later decision making stages they are continuously tested and challenged on the basis of their relevance to the agreed upon working definition of the problems to be solved and of the alternative ways of ameliorating or solving them developed during the articulation process.

It is in this regard that policy makers confront real problems of timing in their attempts to shape legislative decisions. Once the articulation of interests and issues is fully developed it is quite literally too late to get major new conceptual elements or fundamentally different approaches to solving a problem into the language system being used to debate and finally to decide the issues being acted upon.

Interest Aggregation

As was suggested in Figure I, after interests have been articulated into specific legislative issues or proposals, the legislature begins a complex process of sorting proposals, assigning priorities, combining similar proposals and re-formulating submitted bills into final form for formal decision making. Almond and Powell (1966) refer to this second major stage in the legislative workflow as interest aggregation. They use this term in order to emphasize the fact that initial demands for policy are often narrowly conceived, incomplete, overlapping, or needlessly contradictory thus requiring painstaking synthesis into more comprehensive or at least more precise form. The aggregation process also involves determining which initial proposals are backed by committed and broadly representative political interests and which are without adequate support from powerful or legitimate groups.

The substantive policy committees of each legislature are the primary agencies through which aggregation takes place. During committee "working" or "mark-up" sessions individual legislators and staff members contribute to the aggregation process through discussion and analysis of various proposals. During public hearing sessions of the committee various interest groups, executive agency spokespersons, and non-committee legislators make their views and recommendations known. Of course much of the work of interest aggregation takes place outside the formal committee meetings.

Through private meetings between committee members and representatives of various interests, through substantive staff work aimed at assessing the implications or costs of various proposals, and through informal discussions in hallways, restaurants, and offices, many changes are made in proposals and many agreements reached regarding legislature priorities. Occasionally issues are seen to be of such overriding importance that the elected leadership of the legislature or even the governor are drawn directly into the aggregation process. Generally, however, state legislatures, like the federal congress, give over to their various policy committees substantial autonomy in the aggregation process and final authority to decide what interests will be represented in any legislation reaching the floor for a vote (see Fenno, 1973).

The magnitude and complexity of the aggregation task undertaken by the legislature is difficult for anyone unfamiliar with the way legislatures operate to fully appreciate. It is perhaps best revealed in the extent to which bills originally introduced and referred to various policy committees disappear without ever reaching the floor for a vote. Wahlke (1970:83) noted that only 550 (58%) of the 944 measures introduced during the 1963 session of the Iowa legislature ever actually come to a floor vote. We found that an even smaller percentage of the 2,611 measures introduced in the 1977 session of the Oregon legislature reached the floor. Only 1,475 (56%) of these bills came to a vote in the house in which they originated. Of these, an additional 170 measures (7% of the total) died in some committee of the second house after passing in the house where they were originally introduced. Thus the legislature committees in Oregon stopped 51% of all articulated bills before they reached the point of final legislative decision making. This does not, of course, mean that the committees stopped all of the ideas and proposals contained in these 1,366 bills which disappeared. Quite to the contrary, the disappearance of a bill frequently means that its provisions have been incorporated into a similar proposal or that a duplicate or more comprehensive bill seeking to achieve the same results has been considered in its place. The point to be made here, however, is that in addition to resolving conflicts and choosing to deflect or defer some interests in favor of others, legislative policy committees must work hard to aggregate interests which are similar in purpose but not yet united in support of a single legislative proposal. Recognizing duplication of intent, choosing among competing approaches to the same policy goal, and amalgamating similar proposals into a single more comprehensive policy is difficult, time consuming, painstaking work which requires a prodigious effort on the part of legislators and their staff.

Aggregation as seen by those who do it. Our field data provide many illustrations of the nature and magnitude of the aggregation process. Our respondents frequently reminded us that aggregation begins even before a proposed policy has been fully articulated and submitted as a bill. The use of the phrases "what would fly" and "what would sell" are found repeatedly in discussions of why certain provisions were incorporated into

71

a bill while others were left out. All the participants are quick to recognize, however, that this preliminary aggregation work can never eliminate the aggregation work which takes place after the bills are written. Because legislators appreciate the complexity of the aggregation process and the time and effort required for its success, most states require a waiting period between the time a bill is formally introduced and the time it can first be heard in committee. As a California staff member put it, "The reason for the 30-day delay is so that the public can see what the legislature is doing, can comment on it and can let us know if they have trouble with it or if they're in support of it."

During the waiting period policy committee members and staffers will get a pretty good idea about the level of interest and the nature of support or opposition which is developing for a bill as well as a sense of how bills are substantively related to each other and to existing law. Sometime after the waiting period has ended the policy committee to which a bill has been assigned will begin the formal aggregation process. Typically a substantial number of bills are seen as routine matters involving only "housekeeping" details. These bills involve a rather simple aggregation process. After being read in committee, testimony and explanatory comments concerning proposed statute changes are given by the author or someone representing an administrative agency which initiated the proposal. Unless there is some unexpected disagreement, usually of a technical rather than a substantive nature, the committee will give quick and full approval. A good chair and staff will usually see to it beforehand that technical problems do not even arise. Said an Arizona legislator, "Technical kinds of clean-up type stuff--date changes or structure changes that will make something work smoother than it did before, but does not involve money, programming, etc., there is no problem, they usually fly through."

Proposed legislation involving program innovations, budget changes, or affecting multiple interests requires a more complex aggregation process. Then, as one staff member noted, "one concern has to be measured against all of the other concerns" that are being reviewed by the committee. Thus the bulk of any policy committee's time is spent evaluating the legitimacy of the various interests and the adequacy of the proposed policies by assessing their relation to the state's existing statuatory and constitutional framework, by probing the breadth and intensity of political support or commitment on the part of the public and various interest groups, by assessing insofar as possible the practicality and cost effectiveness of the proposals, and by testing them against public values and ideologies which define the limits of legitimacy.

During the aggregation process the function of the legislative author, within the committee room, "is one of presenting the bill in committee, making sure that good witnesses are present to testify on behalf of the bill, and dealing with the members' concerns that are raised." (Calif, Staff) Legislators who expects their bills to get out of committee need to know "before going into a hearing what is irreducable about the bill, what you cannot give away and still have a bill that you'll accept, and what points can be compromised so that if someone else wants to do it differently, he can say, 'ok, we'll do it that way or we'll work with you.'" It was said of California Assemblyman Frank Lanterman, who had successfully shepherded a number of major bills through the aggregation process, "He was persistent as well as persuasive in his case, knowing when to be tough, when to stand firm, when to compromise and when to be conciliatory." (California, Staff.)

Outside the committee both the legislators and their support staff work "to reconcile conflicting ideas and work with people who have differences on specific points to see if they can be resolved." (California, Staff) Public testimony from individuals or special interest groups is taken in committee hearings but persons opposing a bill frequently will also be in direct contact with the author(s) or their staff before testifying in order to see if a reconciliation of differing viewpoints can be reached.

Even when there is general agreement that proposed legislation is necessary as, for example, when California's master plan for special education was introduced, "there were many hours of hearings and a great deal of haggling over specific parts of the bill to suit individual needs." (California, Staff) Major questions concerning funding and implementation such as "How much is this going to cost us? Where are we going to get the money? Who's going to be deciding what the best needs of the children? How can we assume the services will be uniformly provided throughout the state?" (California, Staff) had to be satisfactorily answered before committee approval could be given. By the time the bill appeared before the Senate education committee it needed only a "one-time appearance because a lot of the previous problems with it had already been worked out over in the other House. And when it got over here we not only had the State Department of Education staff providing information and assistance in getting the bill passed, we also had the support of various parent groups and public and private schools involved in the education of the handicapped." (Calif., Staff.)

There are three special cases of the aggregation process which should be recognized. The first situation arises when the legislature is working with an "omnibus" bill which deals comprehensively with a program or issue. When such a bill is moving through the legislature an individual legislator who wants to attach to it some provision dealing with a smaller issue can frequently do so if the proposed amendment is well written and can be easily accepted by most members of the policy committee. Once such an amendment has been accepted in Committee it is rarely discussed either on the floor of the legislature or in a conference committee if one is needed to iron out differences between the two houses. An Oregon legislator describes how this process works in relation to restrictions sometimes appended to the Governor's budget bill in that state. This legislator told us that, since there are only four members on each sub-committee of the Ways and Means Committee, "if I want to put something over big and put a budget note in; I write this up; I get one more guy and I could pass it. It then goes to the full committee and almost anything that a sub-committee puts out the full committee will, by courtesy, pass--because if they don't let one do it the next time when there is an important issue they'll get even. Then it comes to the floor. And say its the budget for the whole Department of

Education--several hundred million dollars--these amendments are a part of it and you can't amend it on the floor." Consequently, "the way it works two guys can put" an amendment onto a major bill and make it law.

A second special case occurs when the legislature is working on a bill which is very important to a small group of legislators or special interest groups but has little saliency for most members. Under these circumstances the aggregation process involves developing solid agreement among the interested group and presenting the issue as one which others either cannot understand or have no right to decide. As one California legislator pointed out, with regard to the development of bilingual education in that state, "since there's not much interest, except for a handful of legislators, that minimizes the spectrum of people that take pot shots at a bill along the way and cause revisions."

A similar narrowing of participation in the aggregation process occurs when the issue is complex and a small group of legislators are seen as "experts" by their colleagues. As a long-time California staffer put it, school finance "is such a complicated issue the legislature needs experts they trust. There are members in our house···who have a great deal of expertise. They all tend to work together,···so when you get four or five key guys to come together on a school bill it's gonna go and you can just sit back and watch it···you really only have to work with a limited number of people--but you have to know who they are." In this third special case of aggregation the bulk of the legislators accept the work of their colleagues because they have learned not only to trust their technical judgment but also to rely on their ability to produce policies which will generally reflect the values and commitments of the legislature as a whole.

In sum. Aggregations involves two important processes. First, aggregation involves garnering support for proposed legislation and working to build the consensus needed to insure its passage. And second, aggregation involves analysis and modification of proposed statute provisions in order to minimize conflict with peripheral interests and/or integrate divergent points of view.

Aggregation effects. As indicated in Figure I, successful aggregation of interests within the legislature yields three important outcomes. First the aggregation process serves a screening function which, on the whole, insures that only "acceptable" policy proposals will ever reach the floor for a vote. The great majority of the bills passing through the legislature are so successfully aggregated that they either disappear entirely or receive overwhelmingly favorable votes and become laws. Floor controversies and defeated bills are the exception rather than the rule in legislative decision-making. Of course, floor approval is not automatically given to all bills coming out of a policy committee (although Lutz and Williams, 1976, report that more than 2/3 of all measures had less than 5% opposition in Texas, Alabama, New Jersey, Tennessee and Wisconsin). The aggregation process does insure, however, that legislators will generally believe that bills brought to the floor are serious matters worthy of their attention and will only rarely feel that time spent casting their roll call votes is trivialized or wasted on irrelevant and unimportant issues. Thus, once the aggregation process is completed, legislators generally believe that those issues facing a final decision all possess at least some legitimacy and that the choices still to be made are controlled more by questions of relative importance and feasibility rather than by concern over whether real social problems or needs are addressed.

A second, and more obvious result of the aggregation process is the emergence of final, formal, more or less precise, legal statute language. Although there are frequently technical legal problems resulting from the passage of a complex or major new law which require the enactment of "clean up," "trailer" or "housekeeping" bills in subsequent legislative sessions, these problems are small compared to the number of technical, legal or conceptual problems in originally proposed legislation. A large number of technical amendments are frequently required in order for a committee to perfect a piece of legislation and get it ready for final passage. Often, of course, the boundary line between "technical" and "substantive" changes in a bill can be fuzzy and can lead to a great deal of conflict and controversy in the committee. This is partly due to the fact that a major part of each committee's work on a bill involves determining exactly what effects it will have, as well as deciding if those are the effects which are desired or intended. Eliminating the unintended effects is seen as a merely technical problem while deciding against undesired effects is viewed as substantive. Completely successful aggregation eliminates both technical and substantive problems.

The third outcome of the aggregation process, and the one having the most profound impact on ultimate legislative policy formation, is the development of a substantial consensus on legislative approaches to the solution of public problems. Whereas, recognition that a problem exists is all that is required to get legislation introduced, it is necessary to develop broadly based agreements on an approach to solving, or at least ameliorating the problem in order to get through the aggregation process. Achieving such a consensus is frequently difficult and demanding because the development of a consensus on one approach to a policy problem precludes the adoption of other approaches. Legislators have recently begun to recognize that the resolution of serious problems requires the utilization of a single approach over an extended period of time making aggregation even more difficult. The acceptance of one policy approach may not only mean the rejection of competing solutions which are presented in the same legislative session, it may also mean screening out alternative approaches for a period of several years to come. As a result, legislators and interest group leaders alike recognize that supporting a policy now may limit flexibility in the future.

One Oregon legislator described succinctly the significance of the policy committee's screening function when he said "The first tendency of the legislature is to rely on the committee. A committee is like an individual, it gets a reputation--it gets a reputation of being a committee you can trust, a committee that's done the homework, that will come down to the floor and spell out what happened and give the members who weren't on that committee a good picture. There are also committees that develop a reputation of not acting in that manner--in a manner that would insure that the area has been totally investigated and both sides heard. And many times on the floor you can see it. In the first instance, when a trusted committee has a bill up for discussion on the floor, there is a certain mood and the bill passes easily. In the second instance, a bill up from a different committee has people running to their bill books to check their notes and to reread certain sections to make sure the committee hasn't given us a bad piece of legislation by not doing a good job."

In Arizona, a State Department of Education staff member discussed the various problems of developing a school finance policy that would get the needed majority for passage. "When you're struggling over policy, particularly school finance, you're marrying the two most volatile topics that any legislature can try to marry, taxes and kids. And all the legislators have a vested interest in that. You can have dog fights over competing information sources which purport to talk about the same topic and you can have endless computer runs to determine whether Joe's little school district was or was not getting his fair piece of the action by translating that into taxes on his folks. And then when the major sense of direction is there you are fine tuning, fine tuning toward the 31 votes in the House and 16 in the Senate and trying to decide what will move the holdouts. What would happen if we drop the assessment ratio on home from 18% to 15%? Would that solve

George's problem?" And a legislator added, "you had to have everything there in order to sell this program."

The successful aggregation of a staff development bill in California is an excellent example of consensus building on a single long-term approach to solving a recognized problem. When the bill was first introduced in 1976 it was based on "a mandate or deficiency model." (Calif., Staff.) It viewed teaching professionals as being deficient and contained a mandate backed with sanctions. As a result "teachers' associations were very much opposed to it. Behind the scenes they were all over the bill in a hard kill position and it failed to pass in Assembly Ways and Means."

In 1977, a new staff development bill (AB 551) was articulated on a clinical model and provided incentives, viewing professionals as having abilities and desiring to learn. The teachers' associations were very much in favor of 551 and it had the support of almost the entire educational establishment. They had a role in developing the bill and they thought it would really make a difference. It went easily through the education committees and Ways and Means and, in fact, it is unprecedented because it received a five-year commitment of state funding.

Interest Allocation

As suggested toward the bottom of Figure I, a third stage in the legislative workflow follows the aggregation phase. Almond and Powell (1966), who are helpful in distinguishing the articulation and aggregation stages, inappropriately consider the final outcomes of a legislature to be merely the culmination of the aggregation process. David Easton (1965), however, highlights the importance of seeing legislative decisions in terms of their impact on the "*allocation* of values" *for* the society rather than as the simple outcome of interactions among the interests which were responsible for triggering initial proposals. Previous research on legislative decision making suggests, and our field data confirms, that there exists within the legislature a distinct stage in the decision process characterized by this focus on the allocation of values. In our earlier report (Mitchell, et al., 1977a) we focused on floor debates and roll call voting as the place where legislative attention shifts from aggregation of interests to allocation of values. While our data confirm that these final votes are seen by the legislators as allocative, we found that the emphasis on allocation is also characteristic of work done within legislative fiscal committees. We discovered that fiscal committee members were substantially less interested in the origins of the interests which they confronted than with allocative implications of budget and appropriation decisions with which they dealt. To oversimplify the issue, we found that education committee members were more oriented to "how to solve problems" which are presented to them while fiscal committee members assume that they must decide "which problems should be solved" from among many alternative programs which they sponsor and fund. That is, policy committee members tend to feel that problems are massive and complex so they must identify and choose the appropriate solutions while fiscal committee members feel that more or less adequate solutions are being proposed on every side making it necessary for them to set priorities and decide where to concentrate limited resources.

Allocation as seen in our Data

An illustration of the way in which the allocation process often begins before a bill reaches the floor for a final vote is provided by a California bill concerned with special education. This bill, having originated in the Assembly had moved through Assembly Education, Assembly Ways and Means and Senate Education successfully. In the Senate Finance Committee, however, the bill nearly died despite strong support and legislative agreement concerning the substantive nature of the bill. Said a staff member "The Senate Finance Committee is 'death row' for many costly bills, particularly if the Department of Finance and the legislative Analyst's office have both said we can't afford it. And in the case of special education this is what they were saying and Senate Finance listens very carefully to them."

Assemblyman Lanterman, who had been carrying the bill on the Assembly side, averted the crisis when he "showed that Department of Finance had double counted some of the proposal and had failed to subtract a good portion of the costs of existing programs that would be replaced if the proposed legislation was implemented. He really thundered at them, saying in effect, 'you ought to hang your heads in shame. You are our advisors,' and he called it a conspiracy to misrepresent the facts. He then asked the Legislative Analyst where he got his information and learned that that office had accepted Finance's figures. He took into him saying 'We pay you to be our independent consultant, not to simply pick up the administration's figures and parrot them.'" (Calif, Staff.)

Because some members of the committee did not like the price tag the "Chairman didn't really want the bill to go out. After considerable discussion Mr. Lanterman finally thundered, 'Mr. Chairman, call the roll!' And when the roll call ended seven of the thirteen members had voted for the bill. Senator Rodda, Chairman of Senate Education, carried the bill on the Senate floor and it was unanimously approved by the Senate." Clearly the California senate's fiscal committee rather than the total senate membership carried the major responsibility for deciding how much should be allocated to the education of exceptional children. A roll call vote on the senate floor only ratified the decision previously made by the 13-member Finance Committee.

Arizona illustrates a similar allocation pattern in the area of special education. In 1975,an allocation battle was fought in an appropriations subcommittee. Although many members were in support of a new special education program, there were those for whom it "was not a burning issue" and who "were not interested in doing that much for special ed, leaving it instead to the individual, the family to take care of." (Arizona,Legis.) In order to get sufficient money budgeted to do what he felt would be an adequate job "Senator Felix, chairman of an appropriations sub-committee, stopped movement on the entire budget until he got the money necessary. Unless there was appropriate funding alloted to special education" he declared, "there was going to be no flood control assistance which the Maricopa County people really wanted." In order to resolve this battle, "the legislative session lasted two or three weeks longer than it should have," but a new special education funding formula was finally approved.

Since state legislatures can only fund what they can pay for, proposed legislation which involves appropriations, after being passed by policy committees, will often be held by the fiscal committees in a "suspense file" until the total amount available to be spent has been determined. Once the budget figures have been determined various bills held "in suspense" will be discussed and those funded will go on for a final floor vote while those failing to be funded will "die in suspense."

Conference committees also play an important part in the allocative process. When the two houses believe a proposed bill is important but fail to agree on technical provisions of the bill the legislative leadership may appoint a conference committee to resolve the differences. These conference committees have little to say about what approach should be taken to a particular problem, but they have a powerful effect on whether an approach approved in one legislative chamber and not the other will be adopted. In Oregon, the legislative leadership employed a conference committee when, during a floor debate in the House, a Constitutional amendment got bogged down because it was realized that the amendment had technical inadequacies and internal contradictions. The committee was responsible not only for correcting the inadequacies but also for deciding which of the contradictory provisions should be contained in the final version adopted by the legislature.

California provides an illustration of a more complicated allocation decision which was finally resolved through conference committee action.

When the legislature tackled the issue of school finance and school improvement in 1977, two radically different bills were introduced at the same time. Assemblyman Green, Chairman of Assembly Education, introduced a bill in the Assembly and Senator Rodda, Chairman of Senate Finance and a senior member of the Education Committee, introduced a bill in the Senate. Both bills received the approval of their respective committees and the Green bill passed on the floor of the Assembly. The Senate, instead of voting on the Rodda bill waited for the Green bill to come over from the Assembly. When it arrived "Senate Education took out every word of Green's bill and put Rodda's bill in its place. The bill then moved through the Senate and went back to the Assembly." (Calif., Staff.) Because the Senate had eliminated major provisions of the Green bill that were supported by both the Assembly and the Governor, a conference committee, composed of key legislators from both houses, was appointed to examine differences between the two different finance bills, to reconcile conflicts and break the impasse which had been created. Thus, "The legislative staff sat down, listed all the differences and began negotiating at the staff level." (Calif., Staff.) The governor and the leadership made known their desires to the staff group working on the bill. Then, because there was still a "little block at the end of the road" Assemblyman Green and Senator Rodda met together and talked through the various possibilities until they reached agreement. "After hassling for nearly a month the conferees came up with a final result which both authors supported and which included major provisions from both bills." Then the leadership "rounded up" the necessary votes for passage. In this case, all of the participants in the process recognized long before the matter reached the conference committee that there were irreconcilable differences in approach and in specific commitments separating two very influential and broadly supported legislative leaders. This meant that neither clarity of articulation nor successful aggregation could avert the need for a final test of strength and basic allocation of values which would lead to a legislative commitment to one policy and rejection of another. Thus the legislative process moved directly and intentionally to the allocative stage using the preliminary work primarily to clarify issues rather than resolve them.

Most legislation, however, when it is well articulated and aggregated moves routinely through the allocation phase. Approval by a major policy committee, is generally followed by an affirmation in the finance committee which virtually insures a final "Yea" vote on the floor. Said one legislator, "you don't have time to read everything, to explore everything in depth, you have to develop some confidence in your colleagues and believe in the committee system" to get your work done and "you tend to confirm the committee votes with your vote on the floor." (California,Legis.)

The Effects of Allocation

The primary outcomes of the allocation stage in the legislative decision-making workflow include two elements which are easily recognized as major ingredients in legislative policy and a third which is equally important but less often recognized. First, the allocation process determines specific legislative policy intentions. This element is illustrated in the development of Oregon's recent school finance law. As this law reached the final allocation stage was decided that, "fiscal neutrality, that is being concerned to insure that a distribution of school funds creates equal expenditures for a given tax effort " (Oregon, Staff) across all school districts in the state, would be one explicitly intended result.

The second effect of allocation,which is also easily recognized, is the formulation of specific statutory language. A former California staff member highlights this outcome when he says, "Language is all important. When you're talking about a bill that is restricting--or perhaps structuring--a power relationship, just how you state something and how you give the power is enormously important." A recent newspaper column by Neal Pierce (1979) examines some of the implications of this point. He writes that, "It all began when Congress, in the 1973 Rehabilitation Act, declared that, 'no otherwise qualified handicapped individual···shall···be excluded from participation in···any program or activity receiving federal financial assistance.' What did Congress mean? No one can say because the lawmakers carelessly adopted "Sect. 504' with zero hearings, zero debate. The provision's author now says: 'We never had any concept that it would involve such tremendous costs.'"

The third, and less obvious outcome of legislative allocations is the development of a reasonably clear consensus on social priorities which is implicit in all legislative appropriations and statutes and which is frequently made explicit in the course of legislative allocation debates. Final legislative decisions (along with the governor's signature) determine not only what Lasswell (1936) described as Who Gets What, When, How, they also frame a picture of the general direction to be taken in social policy in such a way that the bills introduced in subsequent legislative sessions are carefully screened to eliminate ones which are incompatible with previously established directions. The Oregon school finance law reflects such a consensus on educational priorities. In previous years a pyramid expenditure schedule had been used in school funding. This schedule provided greater financial support, per pupil, at the high school level than at the elementary level. Said an Oregon legislator, "By altering the spending formula so that K-12 were all weighted the same we shifted our priorities back to the primary level, to the elementary school" where the learning of basic skills originates.

Oversight of Legislative Intent

As previously suggested the differences between Figures I-A and I-B reflect the fact that we initially conceptualized the legislative decision-making workflow as consisting of only three basic stages (articulation, aggregation, and allocation). Analysis of our field data led us to recognize the existence of legislative oversight as a fourth distinct decision-making stage. Although oversight has received considerable attention as an important legislative responsibility in the last few years (Cong. Res. Serv., 1976) it is not generally seen as an important part of the basic workflow related to the formation and adoption of the laws themselves. We found, however, that concern with legislative oversight (through such activities as investigative staff work and interim committee hearings) has become an integral part of the decision making process for some legislators and their staffs. Legislative oversight, as distinct from administrative oversight by responsible officials in the executive branch of government is concerned with problem re-definition and the re-articulation of interests rather than with the enforcement of rules, monitoring of expenditures or adjudication of conflicts arising when programs are being implemented. Consequently, legislative oversight serves as a "feedback" process which links an assessment of outcomes from one legislative decision with the definition of issues at a subsequent point in the decision workflow.

As suggested by the structure of Figure I, currently most legislative decisions are merely released to various administrative agencies within the executive branch of government and receive no oversight attention at all. An increasing number of programs, however, are facing specific legislative oversight in the form of mandated evaluation studies, demands for presenting "zero based budgets" to justify all program costs, or forced re-evaluations of legislative intent through attaching a "sunset" provision to authorization legislation. These oversight activities are intended to generate within the legislature a broadly based *consensus on the performance* of particular programs or agencies and to shape new legislative policy by interpreting the effectiveness and efficiency of current policies. As we will discuss more fully in Chapter V, however, there is a decided tendency for legislative oversight to be dominated by a mood of *criticism and demand for reform* rather than disinterested or rational evaluation of progress.

Oversight as Seen in Our Field Data

Interest in legislative oversight is amply documented in our interviews with legislative actors. We noted that in California most of the major pieces of educational legislation passed in the past few years have included mandates (and funding) for evaluation studies. In passing AB 1250 (1974), a "Master Plan for Special Education," the legislature specified certain questions that they wanted answered once school districts had the opportunity to fully implement the bill. Teacher organizations were concerned about 'main-streaming' and whether classroom teachers would have the appropriate training or know-how to meet the needs of handicapped students. The parents of handicapped children raised questions about the Department of Education's regulations concerning parent rights. The legislature expects mandated evaluation studies to answer these and other questions and enable them to decide whether additional action is necessary. Said a staff member, "There are an increasing number of legislators that are concerned about making sure we fulfill not only the letter of the law but the spirit of the law as well." (California, Staff) California's legislation on proficiency standards and staff development, school improvement planning included within AB 65 (1977), Early Childhood Education, and bilingual-bicultural education legislation, all have included mandates for evaluation.

In addition to evaluation studies, interim hearings are sometimes held by individual legislators or legislative committees "to test not only the reaction to a piece of legislation that's been passed but to try and make sure that when there's an area of concern for citizens we find out what that area is and try to determine whether or not it can be solved." (Calif., Staff.) Assemblyman Hart (California) held hearings on recent high school proficiency legislation which he had authored to learn how school districts were implementing the legislation, what problems they had encountered, and whether the State Department of Education had been providing the necessary assistance and guidance. The Oregon legislature regularly appoints several legislative task groups to work during the interim between sessions to explore the effects of legislation and make recommendations.

Sometimes legislatures create special commissions charged with the task of oversight. The California legislature created a commission on bilingual education to evaluate bilingual programs and help determine future policy directions. They also created a commission composed of teachers, university personnel involved in teacher education and interested citizens to monitor the implementation of major legislation reorganizing the licensing and certification of public school personnel.

A small group of legislators view oversight as a major part of their legislative responsibilities. Such legislators seek to raise questions of oversight throughout the legislative process. In Oregon, for example, one legislator questions the practical value of nearly every educational statute passed in recent years. "While the theory may seem sound what will implementation actually involve?", he asks. "What kinds of changes are you making in the institutions affected?", he wants to know. Moreover, he suggests, "the public still wants accountability but now they want to make sure we are going in the right direction. So the momentum toward mandated accountability has slowed. But more discussion on the quality of mandated programs as opposed to simply making sure the school districts hit all the high places in education" is required. Such a viewpoint--critical of recent laws and anxious to incorporate a changing view of what the public wants into every policy discussion--leads such legislators to closely scrutinize the performance of public agencies and to challenge the validity of many established programs.

To Summarize

While oversight of established policies is not easily recognized as a distinct stage in legislative decision-making it provides basic ingredients in the ongoing policy making process. First, oversight assists the legislature in establishing a consensus on the performance of established programs and policies. Second, it frequently provides the basis for re-articulating interests and thus re-vitalizing legislative interest in a problem which has been inadequately addressed in the past. And third, it mobilizes criticism by providing a rallying point for those who are unhappy with current policy.

CHAPTER III

THE CONTROL OF INDIVIDUAL DECISION MAKING BEHAVIOR

In order to account for the decision making behavior of those who formulate and react to legislative issues and proposals as they pass through the four stages discussed above we need a theoretical framework which identifies major factors guiding or controlling individual decision making behavior.

In order to study the effects of social research and evaluation on these individual decisions we need a framework which distinguishes science from other factors which influence personal behavior. In the next few pages, therefore, we will briefly review prior research aimed at exploring individual legislator decision making behavior and then present in some detail the theoretical framework developed during our own work.

The literature on legislative decision making contains three essentially different schools of thought regarding what to look for when trying to account for why particular decisions get made. These three schools of thought were labeled the influence, constraint and role-orientation theories of decision making in our earlier report (see, Mitchell, et. al., 1977b, Chapter VI). Influence theory, we pointed out, is based on the assumption that decisions arise as the result of emotional or material resources which are brought to bear on a decision maker either directly through interaction with influential individuals and groups or indirectly through communications via identifiable third parties. The questions: Who has influence? How is it exercised? and How is it acquired? have fascinated political pundits and social scientists since the earliest days of the Republic. They have been empirically studied with considerable intensity (though less than completely satisfying results) for more than two decades.

Influence theory has been particularly popular with researchers interested in educational policy formation. Bailey, for example, whose classic work on how Congress Makes a Law (1950) utilized influence theory concepts, applied this framework to the study of school politics in the early 60's (Bailey, et. al., 1962). And Iannaccone (1967) developed a theory of professional educator influence on state policy which has served as both a guidepost and foil for subsequent studies (see Campbell and Mazzoni, 1976).

In contrast with the emphasis on "who talks to whom about what" found in influence theories, constraint theories of decision-making try to explain decision outcomes in terms of the structural, political, socio-economic, and/or demographic factors which constrain or limit a legislator's latitude or discretionary freedom. Constraint theory was first applied to legislative decision-making by Dawson and Robinson (1963) and received its first book length treatment by Dye (1966). This theory of decision-making is closely associated with the process paradigm discussed in Chapter I, and is generally utilized by process researchers in an effort to explain what factors control the operation or outcomes of legislative processes. Milstein and Jennings (1973) found it appropriate to apply influence theory within a process research paradigm in their study of influence patterns in the New York legislature. Applications of constraint theory are not necessarily limited to process research, however. Worthley and Crane (1976), for example, apply constraint theory within an institutional framework.

Role-orientation theories represent a third approach to individual decision-making. They emphasize the extent to which control over decisions arises from various legislative actors' perceptions of, and symbolic responses to, the socio-political milieu within which they live and work.

Role-orientations are defined as relatively stable patterns of expectations regarding the decision-making context and enduring attributions of importance or potency given by decision makers to various factors within that context. This theoretical framework asserts that legislative decisions are controlled and made predictable by the fact that each participant in the decision will, by virtue of his/her role-orientation, focus more attention on some aspects of a decision than others and will evaluate those aspects which are seen as critical in an understandable and predictable way. In other words, role-orientation theory asserts that identifiable elements within the world view used by key decision makers to define the situations which confront them control their inclination to see decision issues in a particular way, shape their sense of responsibility in relation to these issues, and map courses of action compatible with these perceptions.

Since social research is an optional factor in legislation, and since we were concerned both to locate the points within the legislative workflow at which science has a significant impact as well as to identify which legislative actors are responsible for mediating this utilization, the role-orientation approach was adopted. Influence theory was rejected because we were unable to identify in advance what sources of influence might be most important. Moreover, since the influence under study need not involve either direct interpersonal contacts between scientists and legislators or the transfer of easily measured resources like money or political support it was impossible to know how to gather data related to an influence theory of decision-making.

Although constraint theory would permit us to handle data that goes beyond interpersonal relationships and resource manipulations, it had to be rejected because of its assumption that constraining factors have necessary and automatic effects. While there may be some identifiable direct effects on decisions stemming from the mere existence of social scientific research, the clearest of all messages from both the literature on this topic and our early field interviews is that science utilitzation requires choice and commitment on the part of those who use it. Such concepts as these, however, are foreign to constraint theory and are treated entirely as sources of individual or "error" variance whenever a body of data on decision constraints is being analyzed.

In the next few paragraphs we will review briefly the major contributions of role-orientation research and then describe the theory of legislative role-orientation utilized in our study.

Role Orientation Research

Previous research based on role-orientation theories of decision making has elaborated three aspects of the relationship between individual role-orientations and the decisions which result from them. First, some studies simply describe various types of orientations which serve to control legislative decision making behavior in terms intended to be both empirically accurate and theoretically useful. The most important study taking this approach was that of Wahlke, et al. (1962) which sought to delineate a set of functionally distinct legislative roles having generalized significance for all legislators and transcending the unique or particularistic behaviors of individual actors. In Wahlke's words:

> A basic postulate of our research...is that the office of legislator is a clearly recognizable position...that legislators and many other persons...associate certain norms of behavior with this position, i.e., expect certain types of behavior from occupants of the position of legislator simply because they occupy that position, and that a significant portion of the behavior of legislators is role behavior consistent with legislator's role concepts. To study the role of legislator

> then is to study particular sets of norms which underlie relevant legislative behavior. (Wahlke, et. al., 1962:9)

The most enduring contribution of this study has been the distinction between "trustee", "delegate" and "politico" orientations toward one's responsibility to represent a constituency. A number of recent studies have utilized this distinction to show that legislators (see, for example, Jones, 1973 and Erikson, et. al., 1975), school board members (see, for example, Zeigler and Jennings, 1974), city council members (see Eulau and Prewitt 1973), or even school administrators (see, for example, Mann, 1975) behave differently when they conceive of themselves as "trustees" responsible to do "what is best" for their constituents than when they see themselves as "delegates" responsible to "do what their constituents desire or expect."

Kirkpatrick's (1974) study of female state legislators adopts a similar stance. Using Laswell's (1950) basic concepts of personality and role interaction she places a similar emphasis on the nature of legislators' responses to social expectations.

Studies by Barber (1966) and Diamond (1977) also emphasize the description of individual orientations toward legislative roles. In the case of these two studies, however, the emphasis is more on the intentions, capacities, or motives of the legislators themselves than on the expectations of others.

A second aspect of legislative role-orientations emphasized in recent research is the effort to discover the origins of particular role choices in order to explain why some legislators adopt one orientation while others take a different one. Among the possible originating variables which have been studied are: 1) the personal and demographic characteriscics of individual legislators, 2) the political and social character of their districts, and 3) their experiences in, or expectations about, the legislature itself. As Jewell (1970) points out, however:

> The evidence concerning possible sources of legislative roles is fragmentary and sometimes contradictory. For these reasons it is hazardous to draw any firm conclusions about the sources of roles. The evidence does suggest that no single variable offers an adequate causal explanation and that characteristics of districts as well as personal qualities and experience of legislators are associated with differences in roles.
>
> (Jewell, 1970:483)

The fragmentary nature of this prior research on factors responsible for particular role choices has affected the design of our own research in two ways. First, we determined that it would be important to gather information from participants in our study on a reasonably broad array of social and demographic factors in order to test whether these factors were closely related to their orientations toward legislative decision making and/or the value of social science for that decision-making process. We did not expect our data to fully resolve the ambiguities and uncertainties which have characterized previous efforts to explain why roles are adopted, but hoped to add some new information to the growing literature on this topic. More importantly, however, we decided to examine closely the conceptual foundations of the role-orientation concept in order to see if the problem was not more a matter of theoretical confusion than inadequate data.

As it turned out, the literature covering a third aspect of the role-orientation process was extremely helpful in illuminating why the origins of a legislative role choice are so difficult to discover. This third dimension of role-orientation research is a concern with the behavioral consequences of choosing one role rather than another.

The research literature devoted to examination of whether role-orientations effectively control identifiable legislator behaviors is fairly limited, but it offers some real insight into why the role-orientation concept is an important one. As recently as 1970, Jewell underscored both the importance of knowing, and also our limited knowledge about, the consequences of legislator role choices. He aptly pointed out that:

> An analysis of the sources of roles is not an end in itself, nor is it enough to describe the patterns of roles that are found in a legislature. The value of role analysis lies in its potential for improving explanation and predictions of legislative behavior.
>
> (Jewell, 1970:484)

And then insisted that,

> As yet, this is a potential that remains largely unrealized in practice.
>
> (Jewell, ibid)

Jewell could identify only two published studies specifically related to the impact of role orientations on voting behavior (Ferguson and Klein, 1967 and Sorauf, 1963). He concluded that methodological problems, at least in 1970, made it impossible to be sure whether role orientations have any real impact on voting behavior. As noted in our earlier report (Mitchell, et. al., 1977b:131), however, subsequent research has provided considerable support for the idea that role orientations have a direct bearing on legislator behavior. (For examples of this research see: Force, 1973; Rosen, 1973; Jones, 1973; Erikson, et. al., 1975; and Hedlund, 1975). Not only does the choice of role orientations affect the interactions among legislators themselves, they also help to account for such diverse types of legislative behaviors as: 1) frequency of seeking advice on issues, 2) likelihood of turning to interest group representatives for that advice, 3) willingness to accept advice from state-level rather than district level advisors, 4) ability to accurately identify constituent views on an issue, 5) inclination to vote personal or constituent preferences on an issue,

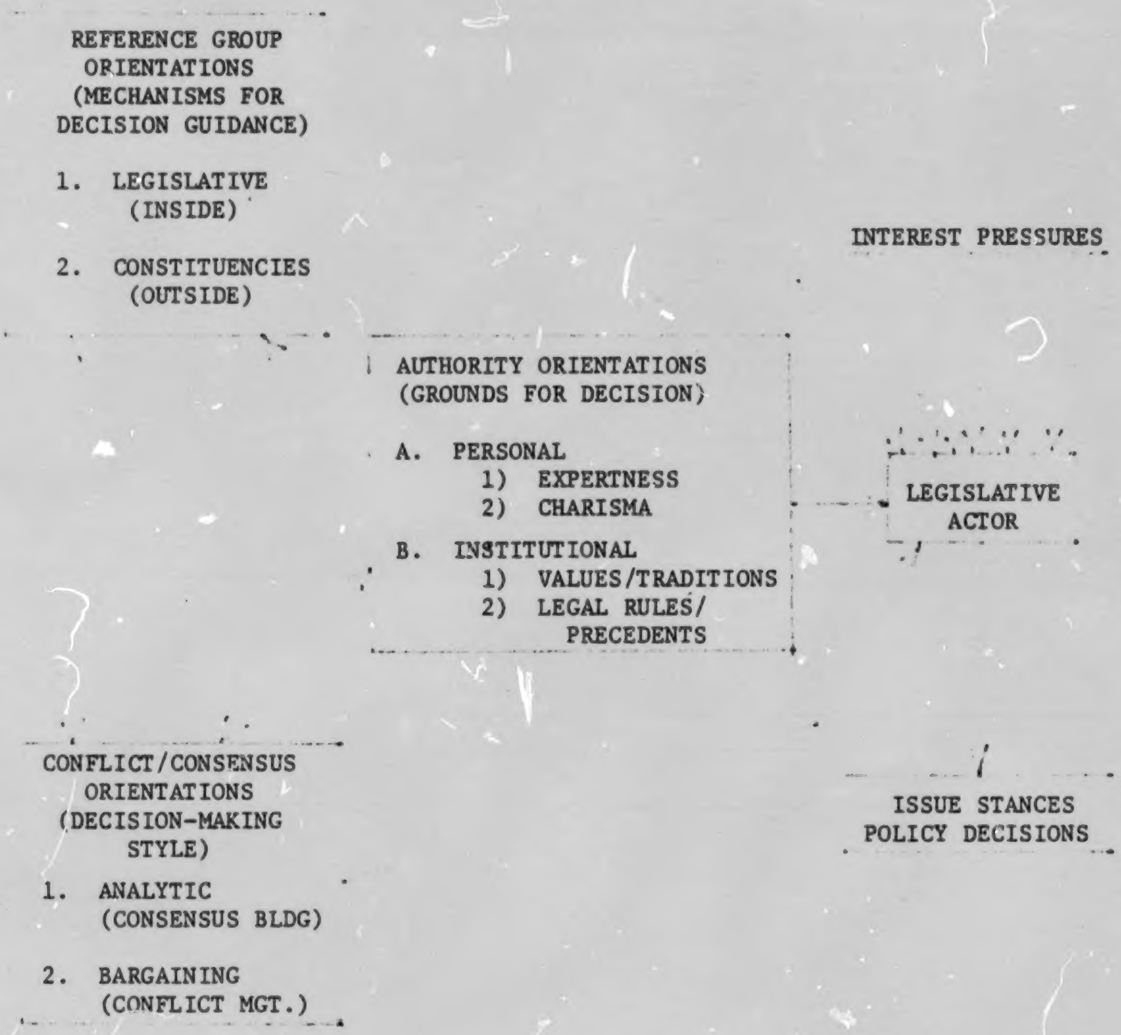
6) likelihood that a legislator will acquire a formal leadership position and 7) the overall output of the legislature.

While there are still many unanswered questions about the exact nature or extent of control over legislators' behavior provided by their choice of role orientations it is certainly beyond question that such orientations have at least some powerful effects. Moreover, as Hedlund's (1975) research suggests, role orientation choices may be derived from shared beliefs about the nature and proper bases for legislative decision making, rather than from explicit expectations about specific types of legislative behavior appropriate to the interactions among legislators and with other actors interested in the legislative process. Hedlund's discovery that legislators, political leaders and lay citizens all share common beliefs and ideas about how legislative decisions are and should be made, suggests that the idea of an "orientation" may be more fundamental than the concept of a "role" or "role-set" in explaining how legislative behavior is controlled. While roles are defined by reference to specific individuals occupying "counter roles" who communicate their expectations regarding a legislator's appropriate attitudes and behavior, orientations toward action arise from a personal integration within each legislator of the individual purposes or goals which he/she possesses, beliefs or perceptions about the normative expectations which others hold for him/her, and the physical or social limits of his/her situation. While roles can be studied by investigating what people expect from each other, exploring orientations involves learning what individuals believe about their own situation and what they desire for themselves as well as they expect of others.

The Orientational Frame of Reference for Policy Makers

Figure II summarizes in graphic form the major factors which previous research and our preliminary field work have identified as the basic elements in all legislative role-orientations. As suggested by the figure, legislative actors orient themselves in relation to three broad dimensions of the legislative context controlling decision-making activities at each stage in the workflow through which political interests and pressures are transformed into explicit policies. First, each participant in the decision-making process must identify and orient him/herself to important reference groups which will serve as reference points for self-evaluation and inspiration as well as sources of explicit guidance and direction for particular issues and decisions. As suggested by the approach taken in Eulau and Hinkley's (1966) comprehensive review of legislative research, the most important distinction among reference groups is the difference between those found inside the legislature itself (such as the chamber leadership, standing committees, expert legislators or staff consultants, political party caucus groups, etc.) and those related to existing outside the legislature (such as constituencies, special interest groups, statewide party leaders, administrative agencies, the governor's office, etc.). For simplicity we will refer to this distinction as contrasting a legislative (inside) orientation with a constituency (outside) one. There is some debate in the literature as to whether political parties should be treated primarily as legislative or constituency groups, since they play an important part in shaping both the electoral process within legislative constituencies and the organizational process within the legislative chamber. Although we gathered information on party membership, our field data suggests that the political

FIGURE II: FACTORS INFLUENCING LEGISLATOR ORIENTATIONS TOWARD POLICY DECISION-MAKING



REFERENCE GROUP
ORIENTATIONS
(MECHANISMS FOR
DECISION GUIDANCE)

1. LEGISLATIVE
(INSIDE)

2. CONSTITUENCIES
(OUTSIDE)

INTEREST PRESSURES

AUTHORITY ORIENTATIONS
(GROUNDS FOR DECISION)

A. PERSONAL
  1) EXPERTNESS
  2) CHARISMA

B. INSTITUTIONAL
  1) VALUES/TRADITIONS
  2) LEGAL RULES/
  PRECEDENTS

LEGISLATIVE
ACTOR

CONFLICT/CONSENSUS
ORIENTATIONS
(DECISION-MAKING
STYLE)

1. ANALYTIC
(CONSENSUS BLDG)

2. BARGAINING
(CONFLICT MGT.)

ISSUE STANCES
POLICY DECISIONS

party caucus within the legislature is very important in orienting legislators during the allocative decision-making stage, but that its importance is more related to the need for intense informal discussion and interaction among the legislators than to particular ideological biases or party platforms. Hence we will generally discuss the inside party role in terms of a caucus orientation, while emphasizing the outsider or constituency significance of the political party itself as a reference group.

One major function of a legislator's reference group orientation is to establish his/her relationship to alternative structures or mechanisms which guide decision making. That is, knowing whether a legislator attends more to constituency interests or to power relationships within the halls of the legislature does not, by itself, indicate what direction decisions will take, but it does tell us where to look for clues which will be predictive. Moreover, as we will describe more fully below, legislators' reference group relationships interact with the other primary elements in their role-orientation thus exaggerating the importance of some factors and minimizing the relevance of others. Naturally, some reference groups will be more important at the early stages of a decision when clarification and articulation of issues are crucial, while others will emerge as central when aggregation and allocation are being pursued. No doubt, the focus of interest will also shift from one reference group to another with changes in the content of various legislative issues.

The second major dimension of all legislative role orientations (presented in box B. of Figure II) is the choice between a conflict management or consensus building approach to decision making. This aspect of policy making is ably described by Charles Lindblom (1968) in his seminal work on how lawmakers engage in decision making processes. Lundblom distinguishes between two basic strategies for affecting decisions available to policy makers. He identifies policy analysis as a strategy for building consensus within the policy system through the discovery and elaboration of common interests and the discovery of problem solutions that facilitate the realization of multiple interests simultaneously. Lindblom points out that bargaining is the basic decision making strategy used to keep conflict within manageable limits once important interests have been accepted as essentially incompatible. Bargaining is utilized when decision makers need to preserve their working relationship with one another despite irreconcilable differences of interest. A bargaining orientation permits policy makers to seek mutual accommodation while moving toward decisions which yield an optimal, if compromised, final solution. While bargaining relies, in part, on careful analysis of the policy proposals at hand, it is based on a fundamentally different orientation toward the policy process. Bargaining accepts agreements among interested parties as limited and turns attention toward the utility of various types of compromise. By contrast, an analytic orientation never accepts the conflicts of interest encountered in existing problem definitions or policy proposals as ultimately irreconcilable. Instead, an analytic orientation encourages the policy maker to constantly re-define interests, re-shape proposals, or re-examine the interests of his/her opponents in order to bring forth a final decision which most can support, or at least accept as legitimate.

The third major element in all legislative role orientations concerns the types of authority utilized to bring about agreement among policy makers. This dimension, depicted in Box C. of Figure II, is the most complex and least well understood. It is clear from prior research, and supported by our own field data, that legislative actors actually participate in the decision making process by offering and/or accepting various types of reasons or grounds for decision in order to generate the necessary support to get various proposals either accepted or rejected by most legislators. The nature of the grounds for decision offered or accepted by any particular legislative actor depends upon the types of authority or power relationships which exist between that actor and other participants in the decision being made.

Works by Mitchell (1978), Spady and Mitchell (1977a,b), and Mitchell and Spady (1977, 1979) argue that there are four and only four modalities of authority utilized to control interpersonal decisions which are recognized as legitimate by the participants. These modalities are: 1) expertise reflected in intimate knowledge about the essential character or implications of a proposal, 2) charisma resulting from close interpersonal bonds expressed as friendship, admiration or affection between individuals, 3) values or traditions which are embedded in respected social institutions and reflected in a respect for those who embody these values and traditions, and 4) formal rules, legal statutes or precedents, or constitutional provisions which are accepted as the legitimate basis on which social order either does now or should exist and which are embodied in a willingness to accept directions from individuals who hold official positions of power and authority.

The first two of these four authority modalities, (expertise and charisma) it should be noted, arise from and depend upon the personal characteristics of the individuals who possess and utilize them to secure the collaboration of others. The last two modes of authority (values and legal rules), however, are created only within institutional settings.

Thus while individual legislators can, through purely personal efforts, enhance their ability to control legislative decisions either by developing greater knowledge and expertise in a subject area or by adopting a more effective and charismatic leadership style, they can only achieve influence based on values or legal rules and precedents by referencing proposed decisions to institutionalized norms within the society or the legislature itself.

Eulau (1962) offers some intriguing evidence for the existence of these four different modes of authority operating within a state legislature. In a study based on the data produced by the State Legislature Research Project (Wahlke, et. al., 1962), he found that legislators significantly differentiate among various types of influence exercised by their colleagues. He found that, in addition to obvious variations in influence derived from formal leadership positions, legislators recognize differences in the levels of: 1) expertise, 2) affection, and 3) respect possessed by various colleagues which affect their ability to secure cooperation and support from others.

Our own data richly illustrates the operation of these distinctive types of authority or influence in the working relationships developed among participants in the legislative decision-making process.

Reference Group Orientations in Our Data

The impact of a reference group orientation on legislative behavior can be recognized in an interview with a long time Arizona legislator. "The newer legislators are very concerned about checking everything out with everybody who's involved. That's not to say the older legislators won't but I think the longer you are around here the better feel you tend to have for what will produce what reaction."

In discussing how such orientations affect the authoring of legislation a California assemblyman remarked that some legislators are attuned to what various "legislators thought was acceptable and what wasn't" while others are keenly aware of the power or special interest groups and "their champions in the legislature." Those sensitive to constituency influences are mindful that they are "putting together a political instrument as well as a governmental instrument," whenever they draft a bill.

Because those authoring legislation hope to provide workable solutions to public problems, legislators and staff involved in the articulation process usually have an outside orientation. Said an Oregon legislator who had been serving on an interim task force studying educational issues,

> My focal point of orientation is what is best for the kids, what is going to improve education, what is going to help our young people who are coming through our schools to be able to function more effectively in our society. I'm not concerned about preserving any educational structures as monuments.

And legislators involved in the articulation of bilingual-bicultural legislation commented that

> A lot of the Mexican-American groups, particularly in education, were effective in promoting the need for bilingul education.
>
> (California, legislator)

Legislators not involved in, or minimally involved in, shaping educational policy making usually have an inside reference group orientation. As one California assemblyman remarked

> I knew I would vote with the Governor and the Speaker. Since I wasn't part of the team that put the legislative package together, I just sat back and voted for it when my time came.

Or as one respondent remarked about a party caucus meeting

> We had a Democratic caucus and Calvo told us that his committee had had sixteen hearings, spent a tremendous amount of time studying the issue and listening to testimony and had come to the conclusion that the Sun Desert nuclear power facility should not be exempted from existing California regulations. I know the members of that committee and if they say they've held sixteen hearings, they know more than I do. I was thinking of voting for Sun Desert but now I'd vote against it because those guys are the experts.
>
> (California, legislator)

As was mentioned earlier, the caucus meetings held by political parties are inside or legislatively oriented reference groups. This is confirmed by several of our respondents. In discussing the use of the caucus a California Senate leader said "The caucus is used as a source of information" to enable everyone to discuss and understand legislation being handled and as a process for "kind of bringing ourselves together. We don't take caucus positions in the Senate but that doesn't mean we don't have peer group pressure." And an Assembly leader said

> The formality of floor debate, and the inattention that's part of that large room can be eliminated by going through the questions in a caucus meeting. Allowing questions in an informal setting and then sometimes enabling people to say certain things they would be uncomfortable saying in public. This is a substitute for visiting each person individually to get their concerns and build a consensus. Also you give people a sense of being involved and knowing what's happening.

Our interviews confirm previous research which suggests that there are many different kinds of constituencies toward which outside oriented legislators can reference their actions. Particularly when trying to resolve issues of school finance, legislators found that when "Everybody really becomes result oriented" it is important

> to not just look at the piece of legislation with respect to the impact within our own districts, but rather to recognize that there is a broader constituency to which

> we all have a responsibility to, in effect, emphasize the part of our role where we are state officers as opposed to being regional representatives.
>
> (California, Legislator)

Another California legislator assured us that the issues are frequently decided on the basis of statewide orientations. He said,

> Quite frankly, more times than not, it goes beyond local to statewide issues and that's when you have to appeal to a larger constituency.

Analytic and Bargaining Decision Styles

Analysis. Analytic approaches to decision-making are clearly identifiable during each of the different stages of the legislative workflow. Speaking in a reflective tone and indicating how he analyzed the issues behind categorical aid legislation, one California legislator said,

> My view from a purist sense, is that we should not have to have categorical programs. But we find that local school districts and boards seem to be somewhat insensitive to special needs so the alternative is for the state to provide some "carrot money" for taking care of special needs.

Bilingual education needs, disadvantaged youth monies, mentally gifted minors funding, early childhood education - "money to say 'districts why don't you be innovative and do things that you should have been doing in the first place?'"

And then he went on to say,

> And yet they are not all at fault because of the way we fund education based on A.D.A. (average daily attendance). Their whole motivation has been towards that concept--developing A.D.A. in whatever fashion or form they can, and the more A.D.A. they can develop the more money they're going to get. So I guess we're both at fault and that's why these categorical aid areas are required.

Another legislator described the complex and extensive analysis underlying legislation he had authored requiring regular evaluation of teacher performances.

> My concern was about what was happening in the California schools. The University of California, which is to take the top 12 1/2% of high school graduates, was accepting students who couldn't read and write at the university level. And the state colleges who take the top 33 1/3% were also having the same problem. We had repeated complaints from parents that their kids weren't learning anything. Books were coming out on 'why Johnny can't read'. And it seemed that all I had was meetings with school people and parents about the sad situation existing in the schools. I had held a number of preliminary hearings on tenure and learned that only three teachers had been fired for incompetency in 35 years. [Considering that there were 200,000 teachers] it seemed to me that that was a very minimal number [to be removed for incompetency] and tie that in with the fact that the schools were doing a 'bad job,' something was wrong there.

Although he was unable to include a solution to the problem in his legislation, this legislator was also concerned about

> the practice in California of automatic promotion. If students don't get something in a critical grade then those students become progressively behind in what they are going to accomplish.

His analysis of the problem led this California legislator to conclude that incompetency on the part of some members of the teaching profession was contributing to poor student performance and decided that some means of making teachers accountable was necessary. He introduced legislation to insure that teaching would be evaluated and that "part of that evaluation would be predicated on whether or not there was any progress on the part of their students." Because such evaluations could lead to recommendations of dismissal and recognizing that teachers would insist upon being protected from being dismissed for personal or political reasons, procedures to provide "due process" were also included in the legislation that was introduced.

The first time the legislation was introduced it was killed in committee following strenuous discussion and debate. Said the author, "It was a very tough bill and the C.T.A. (California Teachers Association) was very active in the defeat of the measure." Regardless of whether or not his analysis was adequate, and even if some teaching professionals agreed with his conclusions they could not, without significant control over major provisions, support legislation so threatening to their existence. And so, before introducing the bill a second time, the author did "a great deal of talking with all the groups involved and worked with all factions of the educational community." He had "meetings with school boards, school administrators and the teachers' unions." He "toured schools and raised questions with administrators such as 'how do you evaluate teachers?'" and found it "was a very embarrassing question to many of them."

Similar legislation concerned with community colleges authored by a well respected member of the Senate came out at the same time and the two men agreed to co-author and carry both bills in their respective houses. And the second time the legislation passed. Although analysis of the problem gave rise to the basic form of this legislation, consensus building to support the proposed legislation, bargaining and compromise on points that proved to be too threatening and a personal respect for the authors on the part of their colleagues all played a role in the decision-making process.

In recalling the questions and arguments raised in policy and finance committee hearings concerning the need for and funding of bilingual-bicultural education legislation a California assemblyman revealed his analytic orientation toward the problems being addressed by such legislation,

> The major problem is that many people view it as E.S.L. or English as a Second Language, rather than a very substantial cultural approach to dealing with the education of children that have a language deficiency in English. The second problem, the political problem, is the perspective in which the issue is raised. People feel that funding for one year will solve the problem and questions such as 'Haven't they learned how to speak English yet?' continually arise. There is very little conception of the fact that we are immediately adjacent to the largest part of the Western hemisphere which is basically all Spanish speaking And as long as the migrancy factor enters into it there is going to be another generation coming over that border that starts at ground zero and is going to need these programs to make it. The third problem is financial. [Questions such as] 'why don't they pay for it themselves?' or 'why aren't they paying for it?' or 'why should we be paying for programs for people who aren't citizens of this country?' [are regularly raised.] And the response to those questions is that they are paying. Studies in San Diego and Orange County show that the undocumented are, in fact, paying through sales and income taxes.

Policy and finance committee members indicate that they receive detailed reports analyzing the policy, legal and financial implications of legislation being discussed. These reports are prepared by committee or personal staff, the legislative counsel, legislative research offices, department of finance staff or by various administrative agency staff. Because legislators face so many legislative proposals during any given session and generally are not involved in the articulation phase of legislation being heard in committee these analyses play an important role in the decision-making process. One California staff member expressed a view echoed by staff in Oregon and Arizona that

> Legislative input is more often based on their constituency coming forward and saying, I don't know if you are aware of this but the way this bill is written now it's going to impact on my school district in such and such a way. At that point legislators frequently find out, especially with large bills, that they are not going to have time to go through the bills. That's why our function is to provide written analysis of legislation.

One important dimension of the analysis of legislation that occurs before and during the aggregation stage requires committee or personal staff members to "know if it's going to be controversial and if some people are going to have trouble with it." If so, they will "call them ahead of time and say 'Look you should know that this is what we are trying to do with this and if you have some problems with it you should come talk about it." (Cal. Staff) The staff are expected to keep in mind the intent of the legislation and to protect that intent during the process of accommodation. As another staff member put it,

> My role is bringing in people from across the state who have concerns, sitting down with them, trying to understand what their concerns are, and seeing how those concerns can be met. After analyzing these concerns my role is "'reactive...a negotiating role."
>
> (California, Staff)

While lobbyists are usually thought of as taking a bargaining approach to the decision making process, legislators noted that some lobbyists are particularly able and willing to provide them with an analysis of legislation during both the aggregation and allocation stages.

An Arizona legislator discussing the implications of recent Arizona court decisions and the position of the legislature in regard to school financing recalled that

> The education lobby was most vocal in explaining to us and trying to interest us in the fact that if we didn't do something along the court decision lines, even if we didn't go as far as some courts had indicated, that we would be flying right in the face of a court suit.

And an Oregon legislator said of lobbyists "Obviously their job is to be an advocate for a position but I've found that many of them will provide you objective information." In trying to decide how to vote on the floor, on bills encountered for the first time at that stage, this legislator "would have lobbyists come in and give me both sides," thus "trying to convince me in both directions." Using this adversary style of analysis this legislator, in addition to consulting "people that I trust," made decisions on issues in areas where her personal knowledge was limited.

As legislation moves to final decision on the floor analysis becomes largely a matter of summarizing and re-interpreting arguments used previously during policy and fiscal committee hearings. Legislators tend to become concerned to preserve their energy and time and to trust that important problems have all been taken care of in the committees. An Arizona legislator put it quite succinctly,

> You don't want to spend a lot of your time fighting lost causes because you've got other things on the fire that you might be able to get through if you devote your time to those.

In California, "the third reading file," an analysis prepared by the Assembly Office of Research, is often the only analytic material provided when a bill reaches the floor. "And that's the basis on which most people make up their minds at that point." (California, Legislator)

In the fourth phase of the legislative workflow, the oversight stage, analysis plays an important role. With the inclusion of an increasing number of mandated evaluation studies in authorizations for many new programs, extensive analysis has become important in determining whether new legislation is needed, continued funding is worthwhile, further study is needed, or whether perhaps programs and funding should be terminated.

The Oregon legislature, which holds sessions only in alternate years, makes extensive use of task forces during the interim period to study major issues and proposals. Because there was extensive discussion "in the 1977 session about mandated requirements" in the schools and because concerns were "heard from parents, school districts and others, a task force was appointed" to study the issue of state mandates for high school graduation requirements. An Oregon senator told us "The public, I think, was saying that we want to keep accountability but we want to make sure we are going in the right direction." The task force held meetings and hearings, took testimony and when they "concluded their deliberations they recommended that no new requirements be added until there is sufficient time to review the current status of, and an evaluation made of, the graduation requirements." As a result of a "conscious decision on the part of a committee of legislators there has been a slowing of the rush toward mandated accountability on the part of education in Oregon" and there will probably be no major new legislation for the time being.

In other states interim hearings are also used to test the effects of legislation and to discern areas of concern or to determine whether new legislation is necessary to solve problems. A staff member involved in this process stated "It's an ongoing cyclical process of trying to readjust the law to meet the need." (California, Staff)

Bargaining. Although analysis of issues is widely recognized as an important factor in legislative decision-making, our data also show that adopting a bargaining stance is both natural and frequently necessary for resolving important issues.

Bargaining, at the articulation stage of the legislative workflow, occurs when those involved recognize that conflicts of interest are developing in the proposed legislation. For example, although a statewide task force had been utilized to analyze and refine the major ideas which were used in the articulation of California's early childhood education legislation, the bill was actually drawn up by the State Department of Education. The involvement of Department staff in the bill was prompted because, "they felt they needed to write it in a way that would take out some of the kinds of words, phrases and language" that would, "drive conservatives up the wall" because, "there was a conservative demeaner under Governor Reagan's administration and the State Department wanted to make sure that they didn't blow it by using buzz words and things." (California, Legislator)

This desire to produce an acceptable proposal by compromising or bargaining on issues involving fundamental conflicts before introducing a piece of legislation frequently leads to the development of legislative "packages"--omnibus bills which address a number of different aspects of an issue simultaneously. By drawing divergent interests into a single bill, the legislature is able to develop broad support for proposals which would never get a majority vote if tackled one at a time. In Oregon this was done in handling school finance so that, "we would have more latitude when talking about individual components" of the package (Oregon, Legislator). As we have previously mentioned, the task force preparing this legislative package undertook a thorough analysis of the problem but also recognized that there was strong support for several different approaches to finance reform. As a result they prepared a comprehensive package that would make each provision, "more acceptable to a wider range of people." (Oregon, Leader)

In a similar situation the legislative committee that developed A.B. 65 (1977), California's latest school finance legislation, also used a "package" form of omnibus legislation to gain a broad base of support. This legislation included funding for the various categorical and special education programs in addition to the general support program. In discussing the inclusion of these programs, the legislator and staff group which actually drafted the bill had initially considered collapsing "all of the various categorical aids into two major categorical titles" but quickly learned that while this might be analytically sound it was politically unacceptable. A number of these programs had "specific educational constituents supporting them" and such an action "was tantamount to a sacrilege on our part as far as some of these groups were concerned." (California,Legislator) When a similar bill started in the California Senate, a different approach to bargaining was taken. "People in the Senate started out with a low base" for they knew "that augmentations would have to occur to get support from the chicano caucus and the black caucus." (California,Staff)

Another indication of early bargaining is the fact that in addition to funding, the Assembly version of this bill included educational reform measures because some legislators believed that the "use of the school finance vehicle was the only way we could build up the political support needed to overcome opposition by the institutional lobbies to that kind of legislation." (California,Leader)

In the aggregation stage many legislators discussed the need for a bargaining approach in building coalitions to get legislation passed. Said one Arizona senator,

> There are, in reality, more than two parties in the legislature. There is the Republican and the Democratic party, there is the urban and the rural party, and then there is the Senate and the House. And, at any given time any one of those can be the governing factor, depending on what the issue is. So it's not always a partisan system, neither is it always urban/rural. For example, witness the fact that we just passed a bill that significantly increases the rural community college capital outlay funding but does nothing to help the urban funding. They had to have

> urban votes to get that bill out. They got the urban votes. But there will come a time when the urban votes will need the rural votes for something urban and they will expect something in return for that.

Or, as another legislator said,

> You find different alliances and allegiances lining up, [depending on the issue.] When it comes to school finance it's the 'haves' versus the 'have nots',[but when it comes to] special education you won't find as much of the rich versus the poor. A lot of it depends on the educational philosophy of the district that you represent. [For example], you'll find that Mesa is very conservative when it comes to most educational fields but when it comes to special education, they're into it. They understand what special education is, they've used it to good advantage out there and so their legislators are a bit more responsive to special education. But when it comes to bilingual education they don't have a very high percentage of minorities there and so they haven't really gotten into bilingual education that much. You forge these types of alliances though.
>
> (Arizona, Legislator)

And an Arizona Senate leader illustrated the politics of accommodation to gain needed political support for passage of proposed legislation with the following story:

> We had a bill that passed out of education to raise the grade level of mandatory schooling to the tenth grade so that we could require schools to furnish textbooks. It's called free textbooks but it would be loaned textbooks to the students. We have been trying to get a free textbook bill for about 10 to 12 years and so if we mandate age 16, or the tenth grade, then we can require schools to provide textbooks. Its always been a Democratic party bill. Because the author is a member of the Republic party controlled House, she can't get it up in the House, so I put it in over here and a Republican senator sort of came up with this idea. The thing of it is, the Republicans would like to pass it but they don't want it to be a Democratic bill. As a result the proposal to raise the school leaving requirement to the tenth grade ended up as a Republican sponsored amendment and now the bill can get through the Republican House and the Republicans can take the credit for giving free textbooks to students.

As we have already mentioned, staff members not only analyze legislation, they also work to negotiate differences. In discussing California's Ryan Act revising teacher certification, a staff member said, "The more technical a proposal is the more members rely on staff." Teacher certification is "fraught with complexities and it's very difficult in a public forum to deal with some of the complexities of a credentialing law." Negotiations aimed at resolving conflicts are "made at the staff level," where we "try to develop a concensus among the various staff involved and at that point go to the members. A great deal of what was accomplished on that particular piece of legislation was accomplished in meeting rooms with anywhere from 4 to 10 people and those people again were the consultants of the committees concerned and some of the lobbyists of those interest groups who were most deeply concerned."

In discussing various school finance bills that had been passed in California another staff member discussed the negotiating role of the staff in developing needed support from the special interests to be affected by the legislation. "AB 1267," a so-called clean-up bill that followed a revised school finance law, S.B. 90 of 1972, "was significant because it really got the staff of the legislature and the 'third house' staff, the lobbying staff, to work together in a big co-op kind of a thing to work out the technical details of this bill. And there were a tremendous number of technical problems." Also "that proved to be a valuable forerunner of staff cooperative efforts" on other legislative problems.

The lobbyist's approach to the legislative process is usually a bargaining approach. In discussing the influence of various special interests on legislation an Arizona senator said the lobbyists go about winning support for a bill "mostly by talking to their friends behind the scenes. They might testify against in a committee hearing too." The essence of these communications is focused on what their interests really are rather than how problems can be solved. Or as another legislator put it,

> Some of the lobbyists have direct input into the offices of certain representatives over here. They just walk in and they tell them, 'Hey, you know, you can't pass this idea here because its going to kill our industry down here, or it's going to raise our taxes.' Also, a lobbyist has money to throw around at election time, or influence.
>
> (Arizona, legislator)

This money and election influence can easily produce significant modification in a bill or even withdrawal of it altogether. The bargaining process may be touched off when legislators care either too little or too much about an issue. An Oregon representative described the resulting bargaining situation when personal interest is too high,

> A Senate chairman was opposed to a whole group of things we were doing. He used his personal position to hold up legislation or talk people into the ground. He would take off on some funny little things that he wanted put into a bill and would just hang up a bill.

Because this legislator was preventing many important bills from getting out of his committee, the Senate President was informed that he better "sit on" the chairman or House committees wouldn't work to clear certain bills that the Senate President wanted passed. This led the Senate President to act, "three of them twisted his arms for an hour and then he voted as we indicated it had to be done."

Another Oregon legislator described what happened when some committee members had too little interest in the issues facing a committee. "They were unable to get bills out, bills that the majority party wanted." She said that some committee members "didn't like the state being involved at all" because "their thing was to protect the schools and not have the legislature involved." In fact, "one member didn't participate, he wasn't even there most of the time." As a result the leadership added members to the committee so that needed bargaining and analysis could proceed and committee work completed.

When the aggregation process fails to successfully build a solid coalition of the interested parties bargaining continues into the allocation process. Legislators and staff in all three states recalled instances of this occurring. In Arizona, the policy committee finally passed out a special education bill but there was still disagreement about the amount of money needed to insure successful implementation of the bill. The finance committees of both houses wrestled with the money question and one "came in with $39 million to begin with, the other with 12. We came down to 29," said a Senator, "and they stayed at twelve and so finally we got 21 and a half." In order to get that compromise, however, the senate finance committee threatened to hold up the entire budget--and they had the needed votes to do it.

In California, in 1975, a collective bargaining bill passed out of policy committees despite strenuous opposition from the California Teachers Association. Only Assembly Ways and Means was left to stop the bill and it was reportedly killed there only because "there had been given several campaign contributions by the Association."

While legislators in Oregon agreed that a school finance bill had to be passed the majority of the House Revenue Committee were unable to agree on one particular bill. As a result, said one representative, "we came up to the House floor with a series of bills. We decided we would present a package of bills which they could vote up or down as they saw fit before we got to the final measure which we felt was the better measure." This the House did. Each of the alternatives were voted down and "finally, the final bill passed."

As with analytic styles, bargaining plays a role in the oversight phase of the legislative work flow. As one California legislator pointed out, continuing support for any major legislative program is significantly affected by its initial implementation. He pointed out that much of the support for bilingual-bicultural programs comes from groups of employees who are, "on the payrolls now of the schools" because they are employed by "federal and state funded programs and have a vested interest in the continuation and expansion of these programs." Thus legislative decisions not only respond to important political interests they also create interest groups who later must be bargained with in deciding issues regarding continuity, expansion, or revision of a program.

Authoritative Bases for Decision Making in Our Data

The utilization of all four of the modes of authority as the basis or grounds upon which legislative decisions are either proposed or accepted is also recognizable in our interview data.

Values

Values based decisions may be rooted in a personal belief, a coalition of interests, or a norm accepted by the entire legislature. The Oregon legislator who said "I've been an educator for 13 years and I've kept trying to look at it from the standpoint of what is best for the kids. That was my focal point of orientation..." made a personal statement, a value statement, which was the basis or ground upon which he expected to make decisions concerning educational policy. And he was not alone. Other legislators made similar statements or references to the authority of basic social values. One Arizona lobbyist discussing legislative voting behavior in relation to school finance stated

> Its a philosophical type thing. If you believe that schools are getting too much money now you vote against everything and it doesn't matter. There's no relationship between the legislative process and the end of the

> bill. If it's a school finance bill that doesn't take an appropriation, that's not going to cost the local taxpayers anything, then they say 'let's go ahead and pass it if we think the schools need it.'

Coalitions based on values or ideologies are formed in order to generate political clout for various conflicting interests such as those separating urban and rural legislators. Being more rural in orientation,

> Traditionally in Arizona the Republicans have said 'no' to almost any budget increase for education and the Democrats have said 'yes' but there are some Democrats who also say 'no.' There is a sort of a coalition--an anti-education coalition. There are a few Republicans who will fight for education too, but there is very little switching over.
>
> (Arizona, Legislator)

Value concerns sometimes go beyond individuals and groups or coalition commitments and are adopted by the whole legislature. This is illustrated in one legislator's discussion of California's School Improvement Program. He said that, while the legislature did not want to make humanism a separate aspect of this educational program as one legislator suggested, it was agreed that "values and feelings should be taken into account and that professional educators have responsibility for developing an environment in which learning takes place." As a result, there are allusions to those things throughout recent educational legislation so that "people involved in education understand that it is the intent of the legislature that school is not just a place where we pump facts into highly disciplined children by rigid individuals who don't care anything about them as people." (California, Legislator)

A California lobbyist indicated how values affect decisions when he said, "Legislators recognize dedication to a theory. There's a great respect for a person who grabs a cause, voices it well and is espousing it in a timely fashion." For example,

> Gary Hart is a very idealistic person and would be shocked if he were accused of being a politician. He's that kind of guy. He prefers to be considered to be an idealist who operates on the basis of, 'tell me what's right and I'll fight for it,' and it doesn't make any difference who gets in his way. He's aesthetic. He pays very little attention to social amenities, to social mixing. He's greatly disturbed by anything that's wrong. He's puritanical almost.

Not only is respect for values readily identified in our data, the impact of those values is reported in the discussion of specific legislation. For example, Early Childhood Education legislation originally included preschool children but that

> had to be completely taken out of consideration because Governor Reagan came under intensive pressure from the right. The right suggested to the Governor that the early childhood education movement was a well planned effort to steal the child away from the family--to be raised by the State for indoctrination purposes.
>
> (California,Legislator)

In addition to affecting the fate of particular pieces of legislation as they are being decided, values and ideological orientations account for continuity in the legislature's response to broad educational issues over time. Commenting on the development of school site council reform provisions in California's AB 65 (1977) a lobbyist said "this is a Democratic and liberal legislature, particularly in the Assembly." Such liberal leanings were responsible, "I think, for the seed of teacher expectations for more involvement in school site decision making that was planted in the S.B. 160 (1975) discussion" (California's collective bargaining legislation). So, I think AB 65 was a natural sequel to S.B. 160 because it was in keeping with the value orientation of such legislators as Vasconcellos, Hughes, Hart, Kaiser and Young."

Expertise

Decision making based on a careful analysis of important policy problems and alternative solutions being proposed is easily recognized in our data.

> Any new program, any issue of change, I think, very rightly raises the questions--What's wrong with the way it's been done? And what assurance do you have that this is a better way? And is it enough better to make up for the disruption that you are going to introduce during that period of change?
>
> (California, Staff)

Reasonable and convincing answers to these questions reflecting intimate knowledge about the character and effects of proposed legislation are expected from those who articulate and support changes in public policy.

Legislators, staff and special interest groups who struggle for the use of expertise as a grounds for decision making find that

> we constantly have to fight against the tendency to make policy decisions on the basis of subjective judgments. That we really don't have the data to substantiate and that nearly everybody thinks they're an expert on education because, theoretically, schools are the one thing that communities are supposed to be able to control. And they have a whole theory of it.
>
> (Oregon, Legislator)

At the same time legislators who do use information, data or research studies often have second thoughts about the decisions that are finally made. One legislator, in discussing a major piece of legislation he had supported said,

> I have days, when looking back on it, I wouldn't have voted for it again. Some of the things we outlined in the bill were things that we want to work, we think ought to work. But now I wonder. All kinds of political forces use the school as a vehicle for their personal aspirations and expression of their frustrations. I wonder if maybe we've gone overboard with this stuffing money into categorical approaches to the whole thing. If maybe the school shouldn't have been given more latitude to just deal

> in directive teaching with their youngsters and fewer strings placed by government that end up being translated by non-elected bureaucrats into excessive red tape, clerical responsibilities and reporting responsibilities.
>
> (California, Legislator)

Belief that decisions should be based on the use of expertise does not, of course, mean that the necessary information or analysis is available. Most legislative decisions are made on issues about which only limited evidence is available. Consequently, even when recognizing that an issue should be settled on the basis of expert analysis, legislators are forced to rely largely on common sense and experience. Thus, while supporting the creation of school site councils as a vehicle for improving educational effectiveness (California's AB 65, 1977), at least one California legislator recognized that "to suggest that automatically having parents in there helping to make the decisions improves the quality of public education in terms of cognitive growth or even affective growth, isn't verified by the research. And it certainly isn't verified by my experience."

Although many legislators identify good proposals based on values or traditions there is a general recognition that in some areas the technical quality of a proposed policy solution is vitally important. "School finance is largely under the control of people who have an expertise in this area," said a California senator, "mainly because its terribly complex and not given to rash emotional responses one way or the other." Other than the staff members who are always involved in the finance matters none of our respondents could name more than a tiny handful of people in an entire state who can "really understand school finance and speak intelligently."

Our interview data abound with examples of how specific decisions have been affected by available expertise. One clear illustration of such influence is the development the Early Childhood Education program in California which one legislator told us

> was based on the research that 80% of a child's potential is formed by age eight and that therefore everyone bought it because they bought the general logic of the idea--of dealing preventatively with problems rather than continuing to react at the remedial level with such terrible expense in criminal justice and welfare systems, etc.

Having personal knowledge and expertise in an area often becomes the basis for a legislator's support of a particular proposal and will be used to influence the decisions of others involved. In a similar fashion, legislators will call on the expertise of friends or special interest groups to influence specific decisions. An Arizona legislator's decision to support a major special education bill came about because,

> I already knew something about the problem of special education--especially learning disabilities. As a teacher I had seen learning disabilities and didn't know what they were. And once I learned about it, I knew it was right. It fit my past experience with students who, for instance, could talk very well about subjects but couldn't write them down. It wasn't intelligence and it wasn't training--there was something else there. So I saw it immediately and had no problem with it.

This legislator criticizes the glib affirmation of those who say, "well, you know, if you work hard enough, you can teach anybody" as lacking appropriate knowledge and understanding of complex educational problems. And an Oregon legislator concerned with environmental legislation under consideration has "a couple of people that I think are really experts in environmental issues and so I go to them before I take any action or make a final decision."

Though perhaps somewhat over optimistic in his assessment of the legislature's overall level of sophistication in dealing with complex issues, one California lobbyist, nonetheless illustrates succinctly how expert analysis enters into the decision making process. He says "I don't think it would be possible to have more pertinent information than I have seen exhibited. There is an adversary role in the government itself and there is no one person saying all the answers." On the whole, legislators and other key actors whom we interviewed expressed substantial confidence in the capacity of this adversarial presentation of evidence to identify appropriate public policy alternatives.

Legality

There are four distinct sources of legal decision norms in our data. First, as was mentioned earlier "one of the cornerstones of anything that is done by lawmakers is the legislative interest of a code section as it was written even fifteen or twenty years ago." The code is taken as a given. Legal counsel for the legislatures are called upon to summarize the effects of any new law, and counsel or other staff check the code before new legislation is introduced. Likewise, a few individual legislators such as California's Senator Albert Rodda are "masters of the code" who can "at the drop of a hat, summon up facts, figures, philosophies and political history, without notes, and he understands the political realities." (Calif., Lobbyist)

Secondly, in addition to basing decisions on the legal code, legislators assess the legal dimensions of a proposal by looking "to where we are in relation to other states and if we are totally out of line we question what we are doing." (Arizona, legislator)

Third, it was noted that in recent years, many educational and school finance policy changes have been based on the legal guidelines developed by state and federal court decisions. In Arizona, "the catalysts for restructuring school finance legislation were court decisions that were going on around the country" said a legislator, and a desire "to avoid court challenges," said a lobbyist. In California, in the area of teacher-school board negotiations, "The big changes came in the courts," a staff member noted. The courts took the original 'meet and confer' statute and interpreted things that went far beyond the original legislative intent. Thus the activity in this area was primary judicial in nature rather than legislative. And even though the Oregon Supreme Court overturned a lower court finding that a school finance formula was unconstitutional, legalistic norms also played an important part in recent financial policy debates in that state.

And finally, legislators make decisions on precedents that, though not explicitly legal, are well recognized as having legal characteristics. When Arizona passed school finance legislation including expenditure limitations for local school districts in 1974 no provision was made for the fact that inflation would cause a doubling of certain noneducational costs relating to transportation, school lunch programs and utilities. This, of course, played havoc with the intended impact of the legislation and led to an early adoption by the legislature of exemptions from the expenditure limitation provisions of the law for these costs. As a result of this precedent, as one Arizona legislator explained, whenever school districts come in "with a noneducation related" expense for which they are seeking exemption, if the request reflects "fixed costs that schools can't avoid or mandated federal programs that you must comply with " the legislative attitude is that, "You are not starting a new program, you're trying to preserve what you've got and you are going to lose quality of programming that is already there if you don't do something. That is the vocal philosophy that prevails and that is why the exemptions get through. They don't have anything directly to do with education. They are a by-product of having the system. We don't want them to erode the educational product and so we exempt them."

Friendship or Charisma

Our data shows how the personal influence of powerful individuals or groups and patterns of friendship also influence the legislative decision-making process. While discussing categorical programs a legislator stated, "Many legislators may not believe in that program but believe in the author, or the person that is pushing it and have confidence and trust in that person." They believe that the proponents are, "going to implement a program and are pushing for a program that is consistent with their values of life even though it may be inconsistent with what their district thinks ought to be done about such a program." (California, Legis.) Such influence extends well beyond agreement about ideas or shared values, or as an Arizona legislator put it, "I will take advice from people I don't agree with if I trust that they are telling me the truth and I trust their background."

Committees exercise charismatic or friendship based influence through the development of respect and appreciation for their members extending beyond the effects of their expertise in the analysis of issues, their ability to monitor the values to be incorporated in a law, or their work to eliminate conflicts between proposed legislation and prior law. Legislators spoke of "looking at the committee vote." Of seeing "who on the committee voted," and of "knowing the members of a committee and knowing their staff." Said one legislator,

> How does another legislator look at a bill? God knows! I think that most of them have just decided that if a bill ever makes it through, all that education committee's morass which is so incredibly complicated, most of them just don't mess with it. They'll vote for it. That's how it is ultimately decided out there on the floor.
>
> (California, Legis.)

The status and stature of various special interest groups and of individuals in positions of authority--and power--also influence the basis on which decisions are made. "A very real factor" in influencing decisions "is how many people you can bring with you on an issue because you are credible." (Arizona, Legis.)

This was illustrated when Governor Brown of California cut money from the school finance bill (SB 220) in 1975. "The Senate overrode his veto. A Democratic Senate overrode a Democratic Governor and that was significant. It cost him to get the Assembly not to go along with the Senate on the override." Apparently the Governor failed to "recognize Rodda's role in school finance," his ability to gain the support of the education lobby and "the role of the education lobby itself." The staff member who reported these events said, "I think it was scary for Governor Brown. I think it said to him 'this guy Rodda, I'd better take him a bit more seriously than I have in the past and I'd better watch out for that educational establishment because they really crank up the troops.'"

An Arizona lobbyist described the kind of impact and influence a special interest group can have on some education bills.

> We have some of our own legislative goals and if it's a specific goal, coming out of delegate assembly or executive committee, we will seek introduction of the bill and be involved all the way through the process until it either passes or fails. If it's a bill someone else has introduced we'll get involved either at the committee level or when it comes to the floor. If it's a Senate

> bill, and a good bill, we can help it through the Senate. But the opposite is probably true in the House. Sometimes in the House, our active support of a piece of legislature has the effect of killing it, particularly before the education committee.

Such influence rests on the development of personal credibility and friendships as well as specific arguments.

A number of Oregon legislators recognized the ability of staff members to exercise personal influence on legislative decisions. "Richard Munn," said a member of Revenue committee "an outstanding person in revenue, held us together," in our deliberations, "acting like a referee." By maintaining close ties with all members of the committee, "he was awfully good at getting through what was sound and what goes."

Constituencies also impact decisions being made by their legislators. Said one Oregon legislator,

> I do a lot of research in my own back yard. I put the question to the people. I say 'this is what the bill is.' I have some facts for them, for and against. Then I get my answers from my people. I'm totally a hometown boy. I'm a salesman, that's all I am. I'm a salesman and they gave me the product and then I sell it. And that's the way I operate.

In the final analysis, of course, acceptance of a decision need not be based on authority at all. One sometimes finds that an individual or group is able to control specific decisions through sheer political power. When this happens it is clear to everyone that neither arguments about the adequacy of a proposal, its social importance, its compatability with prior law, or respect for the judgment of its proponents has been responsible for the final decision. This shift from authority based interaction to power based control is illustrated in Oregon where the President of the Senate sponsored school finance legislation which, in order to be implemented, had to receive not only the approval of the legislature but also had to be ratified by the citizens of Oregon. He wanted the public referendum to occur while the legislature was still in session and so "he had to get it through the House and Senate" ahead of other legislative measures to do that. Some legislators resisted this act but "finally, with just sheer political power on his part, the bill went through." (Oregon, Legis.) Such power plays remove a decision from the arena of "agreement" altogether and insure that the resulting legislative action will be influenced only by those who control sufficient resources to threaten rather than persuade their opponents. On the whole, however, we found that the use of naked power was rare, and was recognized as inherently unstable and undesirable. If any basis for concensus and agreement could be found it was greatly preferred.

Chapter IV

RESEARCH DESIGN, METHODS AND SAMPLE DESCRIPTION

Development of the Study

The execution of our study required slightly more than two full years. The work consisted of four distinct but overlapping phases. The first phase consisted of a major review of the voluminous research literatures concerning both state level legislative policy making and social science utilization by all types of public policy decision makers. The results of that literature review, along with a substantial bibliography of materials collected and reviewed are contained in Mitchell, et al. (1977b) "Social Science Impact on Legislative Policy: Theory and Research." Major elements in the conclusions drawn from that review have been summarized in the first three chapters of this report, however, readers interested in a complete understanding of the scope and central themes of this literature are urged to read the earlier report since our treatment of its conclusions here is intended more to facilitate the presentation of the findings from our own field work than to give a balanced overview of prior research efforts. In particular, the earlier document reviews available evidence regarding the emergence and changing character of a national social science research and evaluation industry and examines recent changes in the political and organizational characteristics of typical state legislatures--two important factors in the overall picture of social science utilization by state legislative policy makers which will not be re-examined in this report.

The second phase in our research effort was an identification and analysis of central educational policy issues currently receiving substantive legislative attention. The methods used to identify major issue areas, and a description of the essential characteristics of those issued are presented in a second report entitled, "Legislative Policy-Making in Three States" (Mitchell, et al., 1977a) written at the end of our first year's work. A brief review of the substance of that report and a list of the six issues identified for study in our sample states can be found in the introductory section of Chapter II of this report. Readers interested in a detailed accounting of either the major components of these issues or comparisons among the political, economic, and educational characteristics of our sample states are encouraged to read that earlier report.

The third phase of our research work, which began well before the first two were completed, consisted of a series of 90 exploratory, open-ended field interviews with legislators, legislative staff members, lobbyists, interest group spokespersons, and state department of education personnel in the sample states (Arizona, California and Oregon) and approximately 150 hours spent observing legislative committees, floor debates, staff meetings, public hearings and informal interactions among various legislative actors.

The preliminary field work undertaken during the first year of our project had three major purposes: 1) legitimation of the project in the eyes of key legislative actors whose cooperation would be sought during the second year, 2) familiarization of our research staff with both formal and informal aspects of the legislature as a social system, and 3) identification and exploration of major factors which appeared to control legislative decision-making behavior. In order to pursue the first two objectives, we felt that it would be necessary to adopt a "low key" approach in all our preliminary interviews asking primarily questions which would enable our interviewees to talk spontaneously and enthusiastically about the legislative process generally and their own work within it. Moreover, we consciously decided that whenever necessary we would take the time to describe the nature and purposes of our project in some detail so as to lay a foundation for continued contact and interaction with respondents. In order to pursue the third objective, we formulated two open ended questions which provided the focus for most of our interviews. These questions were:

1. What do you see as the major education issues receiving legislative attention? (How are these issues formulated and how are they resolved?)

2. Who are the key actors affecting legislative action on the various educational issues? (What do they do to exert their influence?)

Only about 25% of our interviews were tape recorded in order to minimize the risks of alienating the respondents. Field notes from observations of the legislative process and from the remaining interviews were used in conjunction with the recorded interviews to test our comprehension of the basic characteristics and legislative histories of major education policy questions. The results of these preliminary field contacts were utilized in combination with the results of the first two research phases in order to develop the research design, instrumentation and sampling procedures for the fourth phase of our project.

The fourth phase of our research occupied the entire second year and consisted of developing instrumentation, identifying and interviewing a fairly large sample of key legislative actors in three states and then analyzing the data gathered from these respondents. It is this analysis of data gathered during the fourth phase of our research which is being presented and interpreted in this report. The design, instrumentation and analysis procedures used with this data will be discussed in the remainder of this chapter.

Design and Sampling for the Second Year Study

The theoretical framework presented in the first three chapters of this report, together with the practical experience gained from the exploratory field work conducted during Year I of our project led to *six basic decisions* regarding the conduct of our major inquiry into the impact of social science on legislative decision-making.

First, we decided to *focus our major data gathering efforts on the dynamics of legislative decision-making* rather than seeking to tackle directly questions of where, when, and/or how social science research and evaluation findings impact on decision outcomes. As suggested in Chapter I, this choice was made in order to allow for the possibility that findings regarding legislative utilization of social science would be largely negative forcing us to explain why science is *not* used rather than how it is. Furthermore, since our review of the legislative research literature suggested strongly that the approach taken by early role-orientation theorists such as Wahlke, et al., (1962) has not been adequately pursued in recent research we felt that the total lack of prior research on the role of social science in legislative policy formation is the result of the theoretical frameworks used in legislative research rather than the adequacy of the data gathered. Hence we were early convinced that a major contribution to the theory of legislative behavior would be needed in order to establish a line of inquiry into legislative policy making which would be capable of illuminating rather than obscuring the relevance of such factors as social science in shaping policy outcomes.

Once we had decided to make legislative decision-making the focus of our research we were able to conceptualize the parameters which control legislative actors as they participate in the decision-making process, and to formulate a definition of social science utilization which identifies it as one among a meaningful set of factors with potential impact on specific legislative decisions. As indicated in Chapter III, we defined social science utilization as the application of authoritative expertise to the analysis and interpretation of information regarding the actual or potential effects of a legislative proposal or decision.

Our second design decision was to gather data regarding the substantive nature of, and the decision-making processes related to, specific legislative issues. Not only did we find the previous research literature on differences between legislative issues to be persuasive, we also found that informants interviewed during the exploratory phase of our study were able to speak more spontaneously and to give a more detailed account of the decision-making process when specific issues rather than general or abstract public policy interests were the focus of discussion. As indicated in Chapter II, we selected six issues for study (finance, personnel, special education, categorical programs, governance reform, and basic skills). On the basis of our exploratory interviews, however, we knew that it would be impossible to get enough interview time with most respondents to discuss all of these issues. Consequently, we decided to interview each respondent on no more than three issues (and frequently only one), but to rotate the issues selected for each interview in order to insure a significant number of interviews on each of the six issues.

The third design decision was to utilize semi-structured tape recorded interviews based on a common interview schedule in collecting data from key legislative actors. While the first year's work on theories of legislative decision-making and our experience with the exploratory interviews had clarified how to approach the problem of social science impact on legislative decisions we also recognized that the rich textured social processes which shape legislative decision-making are far too subtle and complex for immediate quantitification. We became convinced that we needed to gather a comprehensive body of data which would capture the intricacies of the legislative process and then to subject that data to the exploratory, hypothesis generating, data analysis procedures appropriate to open-ended field study. We had discovered in our early exploratory interviews that our respondents were not unduly distracted by the use of a tape recorder, especially if they were warned in advance and given access to the microphone switch controlling the recorder during the interview itself.

Our fourth design decision was to supplement our semi-structured interview data with a modest array of demographic and biographic data on each respondent. As discussed more fully below, we gathered information on each respondent's: Sex, Age, Education, Political Party Affiliation, Political Ideology, Legislative Work Role, State of Residence, Ethnicity, Military Service, and Occupation plus Prior Elected Office and Legislative Seniority, for legislators only. These variables were selected partly for the very pragmatic reason that they were easy to secure but more importantly because they represent a broad array of those demographic factors which are typically found to influence social behavior and thus should reflect any general demographic control over legislative behavior.

Our fifth design decision was to formulate a survey instrument capable of measuring the major factors associated with legislative role-orientations. Our intent was to create an instrument which would identify statistically significant differences between individuals with divergent role-orientations. The approach taken to the development of this instrument and the interpretation of its scores will be discussed along with the other instruments developed for this research in the next section (see, Instrumentation below).

Our sixth design decision was to sample participants in the legislative decision-making process on the basis of both: 1) their State of residence and 2) their work role within the legislative system. We selected actors from three states: Arizona, California, and Oregon. As argued in our original proposal, and supported in the second of our Year I technical reports (see Mitchell, et al., 1977a) these three states represent optimal variance on a wide variety of potentially significant factors including legislative organization and procedures, size of state, urbanization, political party activities, school program variations, and various economic variables. They also are clustered together in the western U.S. so as to optimize cost effectiveness in data gathering.

Based on our exploratory first year study, nine specific legislative work role groups were identified as the most important populations for study. Five of these work role groups represent positions occupied by legislators themselves; the other four are groups of non-legislators having intimate, ongoing, and influential relationships with the members of the legislature. The legislator groups identified for study are:

1. Elected legislative leaders from both political parties (i.e., Speaker of lower houses, President pro-tempore of the Senates, Party leaders, whips and caucus leaders).

2. Members of Education Policy Committees in both houses of the legislature.

3. Members of Fiscal Committees (both the revenue and the appropriations committees) in both houses of the legislature.

4. Members holding appointments to both a Fiscal Committee and the Education Policy Committee (a post hoc category created in order to more clearly identify differences between Education Policy and Fiscal Committee Orientations).

5. Members with both an elected leadership role and membership on the Education policy committee. (Also a post hoc category created to separate "pure" and "mixed" role types).

Note: None of the legislators in our three sample states from whom complete data was secured held both a leadership office and membership on a fiscal committee.

The non-legislator work-role groups are:

6. Legislative staff members. There are three distinct sub-groups within this group: a) personal staff members working for individual legislators, b) committee staff members working for a policy or fiscal committee, usually under the direction of the chairman, and c) chamber staff members working on bill drafting (legislative counsel staff), budget analysis (legislative analyst or fiscal office staff), research (office of research staff), or management (legislative council, rules committee, or speaker's staff).

7. The Superintendent of Public Instruction and members of his/her staff. This group includes staff with legislative liaison, budget development, or departmental policy development responsibilities.

8. Education policy and budget advisors to the governor located in executive finance and budget offices and other executive staff agencies, such as Public Employee Relations Board members, etc.

9. Lobbyists, interest group spokespersons, and representatives of local education agencies with responsibility for legislative liaison and/or policy development. This group contains the leaders and the legislative liaison staff members for teacher, administrator and school board organizations, large urban school district staffers, paid lobbyists representing various special interest groups related to education and a newspaper reporter specializing in education.

Table 1 lists the number of individuals within each of our three sample states which were identified for interviewing. In sampling the legislator groups we sought 100% of the individuals within each category. Among the non-legislator groups it was not possible to draw rigid boundaries which would define with unquestionable precision exactly what individuals belong in each group. We aimed, however, at exhausting the most typical members of each group. That is, we sought the identity of all legislative committee and chamber staff with responsibilities directly related to education policy-making, and included, where appropriate, the personal staff of those legislators with a strong interest in education policy if the staff members could also be identified as working on education policy questions and/or were intensely involved as the legislator's "alter ego" when policy proposals are being considered.

Similarly, we sought a complete sample of State Department of Education (SDE) staff and executive staff where policy formulation and legislative liaison related to education were critical elements in the staff members' job descriptions.

Table 1

Legislative Decision Maker Sample Description and Response Rates

Respondent Groups	Total No. in Sample	No. Interviewed (# Issues)	Bio's. Returned	RRS Returned	# Issues Covered by RRS
1. Legislative Leaders	(21)				
Arizona	7	6 (13)	3	2	5
California	11	4 (5)	2	0	0
Oregon	3	1 (1)	1	1	1
2. Education Comm's.	(31)				
Arizona	10	7 (14)	7	7	14
California	11	10 (16)	8	5	6
Oregon	10	8 (10)	8	7	9
3. Fiscal Comm's.	(28)				
Arizona	4	2 (4)	1	1	1
California	18	2 (2)	2	0	0
Oregon	16	15 (25)	15	15	24
4. Fis. and Education	(28)				
Arizona	12	9 (22)	8	7	17
California	13	8 (12)	5	2	4
Oregon	3	2 (4)	2	2	4
5. Leaders & Education	(2)				
Arizona	1	1 (2)	1	1	2
California	0	0 (0)	0	0	0
Oregon	1	1 (2)	1	1	2
6. Legislative Staff	(47)				
Arizona	5	5 (11)	5	5	11
California	25	19 (27)	15	13	17
Oregon	17	14 (14)	8	8	10
7. S. D. E. Staff	(16)				
Arizona	3	3 (5)	2	2	3
California	6	5 (8)	5	3	5
Oregon	7	6 (9)	6	6	7
8. Executive Staff	(9)				
Arizona	1	0 (0)	0	0	0
California	7	4 (7)	4	3	3
Oregon	1	1 (1)	1	1	1
9. Lobbyists	(35)				
Arizona	7	5 (10)	5	5	10
California	18	14 (19)	13	10	13
Oregon	10	8 (10)	6	7	8
TOTALS	227	160(253)	134	114	177
Arizona	50	38 (81)	32	30	63
California	109	66 (96)	54	36	48
Oregon	68	56 (76)	48	48	66

As shown at the bottom of the first column of Table 1, our sampling strategy produced a total sample of 227 individuals; 50 in Arizona, 109 in California and 68 in Oregon. No doubt we missed at least a few individuals whose relevance to our study would have become obvious with more extended inquiry. However we are confident that these 227 individuals represent virtually all of the critically important actors within the legislative policy systems of the three states under study and a large portion of those with highly important but not critical roles.

The second column in Table 1 indicates how successful we were in securing interviews with individuals in each of the states by work role sample groups. As the column totals show, we succeeded in interviewing 160 (70%) of the 227 individuals in the sample. Some of the 160 interviews covered more than one of the six issue areas selected for study. A total of 253 issue-focused interviews were conducted. This means that, on the average, each interview covered 1.58 issues.

Columns three and four of Table 1 indicate how successful we were in getting our respondents to return the biographic and Legislative Decision-making Resource Rating Scale (RRS) instruments utilized to collect supplementary quantified data (for a description of these instruments see the next section of this chapter). As these figures show, our 160 interviews were not supported by either biographic or Resource Rating Scale data (or both) in 46 cases. The analysis of findings presented in the remainder of this report is based largely on the 114 individuals from whom complete data sets were available. Although occasional references are made to taped interviews for which the supporting statistical data was not received, these references are utilized in each case because of the clarity and typicality of the interview responses--not to imply that interviewees who did not return the other data were more (or less) reliable or informative in their responses to our questions.

The final column of figures in Table 1 shows how many distinct issues were covered in the 114 interviews for which complete data are available. Note that the 114 complete interviews covered an average of 1.55 issues--a slightly (but not significantly) smaller number than for the total group of respondents.

Close scrutiny of Table 1 will reveal two work role sub-groups in which response bias may introduce a bias into our data analysis. First, we note that although four were interviewed, none of California's 11 elected legislative leaders provided us with complete data. This means that when undertaking statistical analyses of leadership behavior our findings are based entirely on Arizona and Oregon data. This means that differences between the states, insofar as they are related to the legislative leaders, may be confounded with work role effects in this sub-group. Close study of the California leaders' interview tapes, however, allayed our anxiety about this potential source of bias. California leaders sound, at least in our interviews, pretty much like other legislative leaders.

A second important source of response bias which may introduce some distortion into our data analysis concerns the responses from members of the various legislative fiscal committees. Here there are two types of bias in the responses. First, California fiscal committee members were interviewed in smaller numbers than in either Arizona or Oregon. Second, the incidence of joint fiscal and education policy committee appointments is much higher in Arizona and California than in Oregon. In this area, too, concern over possible biases in our findings arising from sample and response characteristics is substantially reduced by a close study of the relationship between the statistical and the taped interview data.

Having noted here the possibilities of bias in our findings resulting from sample and response characteristics, we will press ahead with the interpretation of our data without continuous re-iteration of these potential limitations. The findings appear very solid, and we look forward to the emergence of corroborating or correcting data from other studies in the near future.

Instrumentation for the Study

All of the letters and data gathering instruments utilized in the course of this study are reproduced exactly as used in appendices A through G. All of these documents are self explanatory except: 1) the interview schedule utilized during Year II (Appendix E), and 2) the Legislative Decision-Making Resource Rating Scale (RRS) developed as an instrument for assessing the orientations of legislative actors to legislative decision-making activities. The next few paragraphs are devoted to explaining the form and purpose of each of these two instruments.

The Interview Schedule. The interview schedule utilized for the 160 tape recorded interviews conducted during the second year of our project is presented in Appendix E. Seven factors were considered in developing and utilizing this interview schedule. First, we knew from the exploratory interviews conducted during Year I that respondents would have a vivid natural language system for describing the nature of legislative decision-making work and that they could easily make generalizations about their own contributions to either specific decisions or the total flow of decision-making in a given topic or during a particular legislative session. By the same token, we also knew that they would not easily identify with three matters of great importance to our study. Namely, they would not: a) readily recognize the notion of a role-orientation as an explanation for variations in individual behavior, 2) easily conceptualize the flow of legislative decision-making as consisting of three or four distinct stages characterized by qualitatively different kinds of behavior and resulting in specific intermediate outcomes, or 3) possess a common understanding of what is meant by the terms social science research and evaluation or respond equally to any definition which we could imagine offering in the brief time available to us for most interviews. Consequently we felt that our interview strategy would have to avoid any direct inquiry into these three areas, but would need to get respondents talking in ways that would permit us to infer generalizations about each of them from information garnered during the interviews.

This led to the second factor governing the final form of the schedule. We decided that the most promising interview strategy was to ask respondents to talk about specific legislative issues, to recount the history and development of these issues over the recent past or projectively into the near future, and to describe how the issue had changed over time. In the letters asking for each interview (see Appendices B and C) we listed three of the six issues selected for study as ones which would be the focus of the requested interview. In conducting the interviews, our intended strategy (not always followed) was to pursue these three issues in succession, exhausting the first issue before beginning a second.

The sequential discussion of issues was partly motivated by our third consideration, namely that we would have to be prepared to complete our interview within 20 to 25 minutes for some respondents while being able to get an hour or more from others. Our strategy was to assess our available time for further conversation after completing each issue.

Once this general strategy was identified, our fourth concern was to provide the proper psychological "set" for the interview. Beyond the usual amenities of explaining the basis for our research, assuring confidentiality, and physically giving the respondent control over the tape recorder microphone switch, we decided to include three specific matters in an introductory statement. 1) We decided to provide a low level "set" toward social science as a factor in the legislative process by mentioning that this was a primary concern of the National Institute of Education in funding the project. 2) We decided to emphasize that our most important need, however, was to understand the development of current educational policy issues as they are being worked on by the legislature and 3) that we needed to know how the legislature sought to define and resolve these major issues.

Our last three considerations in designing the interview schedule were related our understanding of prior research. The fifth factor was a recognition that we needed to know about the central or key actors in each issue area, since these key actors frequently act for the entire legislature in that their views are more or less routinely ratified by other actors. The sixth factor was a decision to probe each respondent's normative views on the issue under discussion in order to identify his ideological perspectives, and the seventh factor was the decision to ask respondents to compare development and decision-making on various educational issues with each other and with other issues confronting the same legislature.

These seven considerations, taken together, led to our interview schedule which was intentionally structured to guide a conversational rather than a question and answer type of interview. In essence, interviewers were asked to become intentionally naive about the content and process of specific legislative decisions, asking their informants to tell them what the issues were, why those were the issues, and how (if at all) the legislature was able to resolve them.

The Resource Rating Scale. In addition to the tape recorded interview and a minimal biographic data form (see Appendix F) we asked each respondent to provide us with responses to an original survey instrument requiring a differential ranking of various possible sources of guidance for legislative decisions. This instrument, entitled "Legislative Decision-Making Resource Rating Scale" (RRS) is reproduced in Appendix G. It consists of 42 pairs of phrases presented in format similar to that used in the semantic differential scale developed by Osgood, et al. (1957). Respondents were asked to complete one form of the RRS for each major issue area covered in their interview by marking an "X" on the line separating each pair of phrases in such a way as to indicate which of the two described a resource that is more valuable and important for defining and resolving issues before the legislature.

Our intent in developing this instrument was to create a way of measuring differences in our respondents' orientations toward legislative decision-making along the three major dimensions--Reference Group Orientations, Decision Style Orientations, and Authority for Decision Orientations--discussed earlier in this report (see Chapter III). To do so we scanned the existing research literature, reviewed our field notes from Year I interviews, and spent a number of hours in project staff meetings searching for appropriate operational indicators with sufficient face validity to serve as measures of particular orientational stances. Once a pool of meaningful indicators was developed, our final instrument emerged from the following seven-step process. First, we decided to develop items which would provide operational indication of: Inside and Outside reference group orientations; Analytic and Bargaining decision styles; and Values, Friendship, Legality, and Expertise Authority or grounds for decision modalities. Second, we recognized that these initial items did not adequately anchor individual orientations in specific mechanisms which, our early field work indicated, play a vital role in shaping legislative decision-makers' actual behavior. We recognized, for example, that some legislators were much more interested in staff advice than others, and that different respondents had very different levels of confidence in and respect for lobbyists, state department of education staffers, or representatives of the governor's office. After several extended discussions of this problem we decided to try to locate or develop a series of items which would reflect alternative orientations toward these various mechanisms which contribute directly to decision-making in the legislature. Once such a pool of items was developed, it became obvious that the most important variations among these items reflected alternative linkages between the reference group and decision style dimensions of legislative role orientations. That is, we realized that the major differences in orientation toward the use of legislative staff (an example of an inside reference group) in the decision process had to do with whether the staff were seen as part of an analytic or a bargaining decision process. An analytic use of staff is suggested by respondents who expect to rely on the legislative staff to provide adequate background information and analysis to support decisions being made. A bargaining style is reflected when one turns to the staff for communication with interest groups or mobilization of support for a proposal rather than for background information or analysis of issues. This led to our third step in the development of the RRS which was to develop a comprehensive set of items which would describe key reference groups both inside and outside the legislature as they appear when making contributions to both bargaining and analytic decision-making styles. This produced a pool of potential items which could be arranged in twelve sub-groups along four basic dimensions, as follows:

A. Authority Modality Items

    1. Values
    2. Friendship
    3. Legality
    4. Expertise

B. Reference Group Items

5. Inside Groups

6. Outside Groups

C. Decision Style Items

7. Analytic Styles

8. Bargaining Styles

D. Mechanisms for Decision-Making Items

9. Inside Analysis Mechanisms

10. Outside Analysis Mechanisms

11. Inside Bargaining Mechanisms

12. Outside Bargaining Mechanisms

The fourth step in the development of the RRS instrument was to decide how to present these orientational indicators in such a way as to elicit from respondents an indication of their preferences for alternative orientations. It was clear we wanted to develop an ipsative measure of choice within each of the major dimensions (i.e., we wanted to know whether, and to what extent, a respondent favored one option over the others within each broad orientational dimension). This led to the use of a forced choice semantic differential type scale asking respondents to rank: 1) each authority modality in relation to each of the other three, 2) inside reference groups in relation to outside ones, 3) analytic versus bargaining styles and 4) each mechanism type in relation to each of the other three. Thus a typical item would look like this:

Legislative Factors (An Inside Reference Group Orientation)	_____ : _____ : _____ : _____	Legitimate Public Interests (An Outside Reference Group Orientation)

This means that a minimum length instrument would need to present the respondent with 14 items: six comparisons among the four authority modalities; one comparison each for the reference groups and decision styles and six comparisons among the four types of mechanisms.

The fifth step in instrument design was the decision to create sub-scales for each category consisting of three items each. This meant that the survey instrument would have three sets of 14 category pairs or a total of 42. Table 2 presents the 36 different phrases utilized in our instrument arranged in the four major dimensions and twelve sub-scales.

Step six was to create three different forms of the instrument by randomly ordering the presentation of items so as to minimize test effects when the same individual was asked to respond more than once to the instrument.

The seventh and final step was to develop the stimulus question (i.e., the instructions) to be used with the RRS instrument. We needed instructions which could be utilized with both legislators and non-legislators and which would elicit information about how the respondents themselves actually orient to legislative decision-making, not how they believe they should orient, or what they think about the orientations of others. Our choice of a strategy for doing this was both simple and straightforward. We asked respondents to give us their own assessment of the relative importance of each one of the paired items in the RRS in guiding the definitions and resolution of specific issues which had just been discussed in the interview which immediately preceded the administration of the RRS instrument. The instruction sheet therefore read as follows:

TABLE 2

LEGISLATIVE DECISION-MAKING RESOURCE RATING SCALE (RRS):

ITEMS BY SUB-SCALES

A. Authority Modality Orientations

I. VALUES
1. Concern for the Public Good
2. Being Committed to Basic Values
3. Giving Priorities to Important Goals

II. FRIENDSHIP
4. Consulting with Prominent and Influential People
5. Developing Mutual Interests Through Close Working Relationships
6. Discussions with Friends or Colleagues

III. LEGALITY
7. Consistency with Existing Law and Procedures
8. Maintaining Established Legal Principles
9. Providing for Orderly and Manageable Change

IV. EXPERTISE
10. Listening to Those with Expert Knowledge
11. Knowing What Effects a Law Will Have
12. Technical Adequacy of Proposals

B. Reference Group Orientations

XI. INSIDE
31. Legislative Factors
32. Interaction Among Legislators
33. Behind the Scenes Work

XII. OUTSIDE
34. Legitimate Public Interests
35. Interaction with Constituents and Interest Groups
36. Vigorous Public Leadership

C. Decision Style Orientations

IX. ANALYSIS
25. Analysis of the Issues
26. Adopting a Reasonable Policy
27. Technical Considerations

X. BARGAINING
28. Achieving a Politically Acceptable Solution
29. Reaching Consensus Among Interested Parties
30. Political Considerations

D. Decision Mechanism Orientations

V. INSIDE BARGAINING
13. Negotiations Among Legislators
14. Legislative Leadership Priorities
15. Reaching Political Accommodation through Compromise

VI. INSIDE ANALYSIS
16. Relying on Adequate Staff Work
17. Deliberations Within the Legislative Committees
18. Reaching Legislative Consensus through Study and Discussion

VII. OUTSIDE BARGAINING
19. Pressure from the Governor's Office
20. Support from Influential Groups
21. Balancing Budget Demands of Various Groups

VIII. OUTSIDE ANALYSIS
22. Insight Provided by Interest Group Lobbyists
23. Interpretations Provided by Executive Agencies
24. Understanding Constituency Interests

LEGISLATIVE DECISION-MAKING

RESOURCE RATING SCALE

On the attached sheets are presented several terms referring to potential sources of information and guidance for decision-making on legislative issues. They are arranged in pairs, separated by a line divided into spaces. Would you please indicate which of these potential sources of assistance you feel are the most valuable and important for defining and resolving issues before the legislature. Indicate your feelings by placing an "x" on the line to indicate which element in each pair of resources is the more critical. Mark the space closest to the end of the line if one element is much more important than the other; mark the space closer to the center of the line if an element is only somewhat more important or useful.

(In some pairs, both items may seem important, while for others both may seem trivial. Please try to give a comparative estimate for each pair, however. Your overall views will become clear when we aggregate your answers for all items.)

Since the importance of resources for decision may vary from one issue to another, would you please fill out one copy of the rating scale for each of the issues discussed in our interview.

Statistical Description of the Respondents

The remainder of this chapter is devoted to describing the legislative actors interviewed for our study in terms of their responses to eight of the biographical data items. Table 3 lists the frequency counts and percentage of the sample coded for each category in the following variables:

1. State of Residence
   which identifies which of the three sample states each respondent represented

2. Legislative Work Role
   which identifies whether respondents were legislators (sum of groups 1 to 5 in Table 1), 2) legislative staff members (Group 6 in Table 1), or 3) other legislative actors (sum of groups 7, 8, and 9 in Table 1). (These categories were developed so that when this variable is cross-tabulated with other variables expected frequencies will not be too low for reliable analysis)

3. Sex
   identifying males and females among respondents

4. Age
   dividing respondents into those born up to 1928, those born between 1929 and 1940, and those born 1941 and after. These divisions were selected because of the possible relevance of W.W.I and the Great Depression as generation markers.

5. Education
   dividing those with a BA or less from those with academic post-BA degrees (i.e., MA or Ph.D.) and those with Professional training (i.e., LLB, MBA, MD, DDS, etc.). There were too few respondents without BA's for further analysis, and too few in any one professional group to be treated as a separate group.

Table 3

DISTRIBUTION STATISTICS
SELECTED DEMOGRAPHIC VARIABLES
COMPLETE SAMPLE (n=114) AND COMPLETED ISSUE RESPONSES (n=177)

Variable	Frequency (%) Complete Ind. (n=114)	Frequency (%) Complete Issues (n=177)
1. State		
Arizona	30 (26.3)	63 (35.6)
California	36 (31.6)	48 (27.1)
Oregon	48 (42.1)	66 (37.3)
	(Missing - 0)	(Missing - 0)
2. Legislative Work Role		
Legislators	51 (44.7)	89 (50.3)
Legislative Staff	26 (22.8)	38 (21.5)
Others	37 (32.5)	50 (28.2)
3. Sex		
Male	92 (80.7)	146 (82.5)
Female	22 (19.3)	31 (17.5)
	(Missing - 0)	(Missing - 0)
4. Age		
50 and Older	39 (36.4)	65 (38.9)
38 to 49	38 (35.5)	56 (33.5)
37 and Younger	30 (28.0)	56 (27.5)
	(Missing - 7)	(Missing - 10)
5. Education		
BA or Less	43 (39.1)	65 (38.0)
MA or Ph.D.	51 (46.4)	79 (46.2)
Professional Deg.	16 (14.5)	27 (15.8)
	(Missing - 4)	(Missing - 6)
6. Political Party		
Democrat	65 (64.4)	100 (63.7)
Republican	36 (35.6)	57 (36.3)
	(Missing - 13)	(Missing - 20)

Table 3 (Continued)

7. Political Ideology		
Conservative	18 (17.5)	28 (17.5)
Moderate	55 (53.4)	88 (55.0)
Liberal	30 (29.1)	44 (27.5)
	(Missing - 11)	(Missing - 17)
8. Occupation		
Public Sector	26 (42.4)	56 (42.4)
Private Sector	36 (42.4)	55 (41.7)
Financial/legal Prof.	6 (7.1)	10 (7.6)
Fall Time Legislators	7 (8.2)	11 (8.3)
	(Missing - 29)	(Missing - 45)

6. Political Party
   we examined only Democrats and Republicans. There were not enough in any other group for analysis.

7. Political Ideology
   this was the self-reported conservatism/liberalism of each respondent. We asked for self reports on a five point scale: very conservative to very liberal, but collapsed to a three-point scale for analysis.

8. Occupation
   All reported occupations were coded into one of four categories: 1) public sector employees; 2) private sector proprietors or employees; 3) individuals with professional careers of a fiscal or legal type (i.e., lawyers, financial officers, bankers, accountants) and 4) individuals who claimed to be full time legislators. Such a classification leaves much to be desired, of course, but represented the only meaningful set of exhaustive and mutually exclusive categories we could apply to the data without limiting its use in further analysis.

The first column of figures presented in Table 3 shows the profile of responses for the 114 individuals who provided us with complete data sets (i.e., interviews, biographical data, and Resource Rating Scale responses for each issue discussed during the interview). As the table shows, Oregon residents were most responsive to our research. The 48 complete data sets from Oregon represent 71% of the 68 whom we had identified as relevant actors. The 30 data sets from Arizona represent a 60% response rate from the 50 relevant actors in that state, while California's 36 data sets represent a somewhat disappointing 33% response rate from the 109 identified actors in that state. Note, however, that this only refers to those who provided complete data sets. As the figures found in Table 1 above reveal, the overall response rate for interviews was 70% with the 61% response rate by Californians comparing favorably with the other two states. The low rate for complete responses in California reflects the experience reported by all project staff members who tried to collect data from Californians as well as respondents in other states that the tempo and mood of governmental business in Sacramento is remarkably more crowded and rushed than in either Salem or Phoenix. There was a general tendency on the part of California respondents to feel and express a need to handle our research in the midst of other pressing business matters which would limit time available and in some cases lead the actor to ask to be excused from participation for sheer lack of time.

Clearly displayed in Table 3 are seven important attributes of our sample: 1) 51 (45%) of our completed sample are legislators, 2) only 22 (19%) of the 114 respondents are women,reflecting the dominance of legislative policy by males, 3) the respondents are comparatively evenly divided among the three generations separated by the Depression and W.W.II, 4) 46% of our sample hold advanced academic degrees and another 15% hold professional degrees leaving less than 40% of the key actors with a BA or less, 5) the respondents were 64% Democrats and 36% Republicans; (among legislators there was somewhat higher response rate among Democrats than Republicans for reasons we can only guess at), 6) most respondents viewed themselves as political moderates (54%), with more liberals than conservatives among those willing to declare themselves, 7) private and public sector occupations were equally represented with a significant group (8%) declaring themselves to be full-time legislators.

The second column of figures in Table 3 shows the distribution of these same biographical characteristics when the biographic data for each of the respondents who filled out a Resource Rating Scale for more than one issue is duplicated, thereby producing a complete case record for each of the 177 issue interviews and RRS profiles provided by the 114 individuals with complete data sets.

Since some, but not all, respondents provided data on multiple issues it was important to determine whether it would be more appropriate to disregard part of the data provided by those responding to more than one issue or to duplicate their biographic data, thus introducing some redundancy and potential bias into the analysis of the RRS data. We made a decision to duplicate the biographic data and utilize all the RRS responses because, as the figures in the right hand column of Table 3 demonstrate, duplicating the biographical data for those responding to multiple issues produced no statistically significant distortions in the biographic characteristics of the resulting sample except for an over representation of Arizona respondents. Since response bias had already made representation from the states disproportionate, we concluded that this procedure would enrich our data set without seriously limiting the validity of our findings. (As will be discussed more fully in the next chapter, we used state of residence as a control variable to test crucial data analyses in order to eliminate any biasing effects arising from the combination of unequal response rates and the over representation of Arizonians among those respondents providing multiple issue interviews).

Crosstabulation of Biographic Variables

Table 4 presents the complete results of a series of crosstabulation tests of the relationships among the eight demographic variables just described. Note that in the fourth column (labeled "p") 12 of the 28 tests show a statistically significant relationship between variables at the .05 level of probability or better with three other relationships tending toward significance at between the .10 and .05 levels. Brief interpretations of the meaning of each significant tendency or relationship are presented to the right of each reported probability.

The two most dramatic relationships are those between political party membership and the education and political ideology variables. We found that Democrats in our sample were both better educated and more liberal than Republicans. There is also a significant direct link between liberalism and education. Our data appears to conform to the conventional wisdom that educational attainment and ideological leanings are linked to one another. Linked to the general pattern of education, political party, and political ideology among our respondents were their occupations. The more highly educated respondents held public sector or fiscal/legal occupations, as did liberal and Democratic respondents. The interrelationships among these four factors accounts for 6 of the 12 highly significant cross tabulations.

Three of the remaining 6 significant χ^2 statistics resulted from the fact that the state in which a respondent lives is linked to three of the four variables in the inter-related cluster represented by Education, Political Party, Political Ideology and Occupation. Arizona respondents

Table 4

CROSS TABULATIONS OF
SELECTED DEMOGRAPHIC VARIABLES

Variables	N	χ^2	df	p	Interpretation
State x Work Role	(114)	14.27	4	.007	Cal. too few Legislators
x Sex	(115)	.36	2	ns	
x Age	(107)	4.46	4	ns	
x Education	(110)	6.76	4	ns	
x Party	(101)	9.66	2	.008	Ariz. more Rep's; Ore. more Dem's
x Pol. Ideol.	(103)	17.94	4	.001	Ariz. more Cons; Ore. Lib & Not Cons.
x Occupation	(86)	14.42	6	.025	FT Legis in Cal. & Ore.; No Fis/Lgl in Cal.
Work Role x Sex	(114)	5.16	2	.08	F's tend to be Legis. Staff
x Age	(107)	14.65	4	.006	Legis = Old; Legis Staff = Young
x Education	(110)	16.69	4	.002	Leg's less Educ; Staff more Prof.
x Party	(101)	.59	2	ns	
x Pol. Ideol.	(103)	2.49	4	ns	
x Occupation	(86)	18.28	6	.006	Legis & Fis/Legal are Legislators; Pub are not Legis or Legis Staff
Sex x Age	(107)	5.78	2	.06	F's tend to be Young
x Education	(110)	1.13	2	ns	
x Party	(101)	.00	1	ns	
x Pol. Ideol.	(103)	.23	2	ns	
x Occupation	(86)	5.42	3	ns	
Age x Education	(106)	4.28	4	ns	
x Party	(99)	.67	2	ns	
x Pol. Ideol.	(101)	5.29	4	ns	r = .21 ; p < .02 Young tend to be Lib
x Occupation	(81)	3.01	6	ns	
Education x Party	(100)	20.67	2	.000	D's better educated
x Pol. Ideol.	(102)	13.40	4	.010	Lib's better educated
x Occupation	(83)	20.92	6	.002	Pvt. more BA's; Pub. more Prof. Fiscal/Legal more Prof.
Party x Pol. Ideol	(96)	15.90	2	.000	Dem's more Lib. r = -.41
x Occupation	(78)	9.11	3	.028	Demo's more Pub. & more FT Legis. Rep's more Pvt.
Pol. Ideol x Occup.	(78)	12.26	6	.056	Pub not Cons; Pvt not Lib.

were more likely to be Republicans (appropriately reflecting the fact that of the six legislative chambers under study Arizona had the only one controlled by the Republican Party--the Arizona House of Representatives). Arizonians were also more ideologically conservative (a fact attested to by our interviewers, and claimed by several respondents from that state). The link between state of residence and occupation is probably an irrelevant artifact of our occupational coding scheme. It springs from the fact that the individuals claiming to be full time legislators were all in Oregon and California, with more of the fiscal/legal professionals among our California respondents.

The last three statistically significant relationships among demographic variables include two which are also relatively irrelevant artifacts of our coding scheme. These are the relationships between the work role variable and the state of residence and occupation variables. The relationship of work role to occupation results from the fact that only legislators could claim to be full time legislators or are likely to have fiscal or legal occupations, while the lobbyists and other non-legislators in our sample naturally would be likely to have public sector occupations. The relation between work role and state of residence results from the response bias among California legislators who more frequently than others failed to return a complete data set.

The last highly significant relationship was between respondents' age and their work role and reflected the fact that legislators tend to be older than those they employ as staff members.

We also noted that, while a χ^2 test of the relationship between age and political ideology did not prove significant when cross-tabulations were based on three age groups and three ideological orientations a Pearson product moment correlation did show a significant, if fairly small, relationship between these two factors (younger respondents tending to be slightly more liberal).

Table 4 also indicates that there is a slight tendency for female respondents to be younger and to hold legislative staff roles rather than to be either legislators or representatives of the non-legislative groups.

In summary. Descriptive analysis of the biographic characteristics of our sample reveal no great surprises and conforms to general expectations about the characteristics of those who serve to make legislative policy in the American states. That is, the sample conforms to expectations about the positive relationship between education, Democratic party membership, public service employment, youth and political liberalism. It reflects conservative and Republican party influence in Arizona. It shows legislators to be older but less well educated than their staffs, and reflects the limited opportunities for women in legislative policy making.

CHAPTER V

DATA ANALYSIS AND MAJOR FINDINGS

This chapter is devoted to an analysis and discussion of the most important findings supported by our data. The chapter is divided into four sections. The first section summarizes the objectives of our data analysis and described the methods used to achieve these purposes. The results of the analysis are then presented in the next three sections. Section B presents a detailed analysis of the various orientations toward decision-making measured by the Resource Rating Scale data. Special emphasis in this section is given to locating the origins of legislative orientations within the demographic characteristics of our respondents. A total of fourteen major orientational findings are delineated and discussed in this section. Section C describes the linkage between orientational data and the involvement of our respondents with the four different stages of the legislative workflow. Two major findings regarding the relationship between decision-making orientation and workflow involvement are discussed. Section D turns to the question of social science utilization within the legislative decision-making process, and presents four major findings regarding the impact of social science on the formation of legislative policies related to education.

A. PURPOSES AND METHODS OF DATA ANALYSIS

Five major questions regarding the relationships between social science utilization, legislative decision-making behavior, and legislative role orientations are implied in the design of our research and will be addressed explicitly in the data analysis to be presented in this chapter. These questions are:

1. To what extent can legislative role orientations relating to: a) reference groups, b) decision making styles, c) acceptance of different authority modalities as bases for decision, or d) reliance on specific mechanisms for decision making be clearly measured?

2. If orientations are measureable, are there significant differences among legislative actors in their choice of a particular set of orientational perspectives? If so, are differences in perspective on one major orientational factor correlated with differences in orientation toward other major components in an overall legislative role-orientation?

3. If there are significant variations in legislative role orientations can we locate factors responsible for creating these differences among the social and demographic characteristics of the various legislative actors? If so, are the demographic characteristics most effective in predicting particular orientation patterns related to legislative experience itself, or do they represent experiences which precede entry into the legislative decision making process?

4. Are variations in legislative role-orientations related to differences among legislative actors in their specific involvement in, or responsibility for, the flow of legislative decisions through the four stages of articulation, aggregation, allocation, and oversight?

5. To what extent, if any, are orientations toward social science research and evaluation related to overall legislative role-orientations and/or involvement in specific legislative decision stages?

These five questions are graphically represented by the question marks located on Figure III which presents the major theoretical constructs of this study.

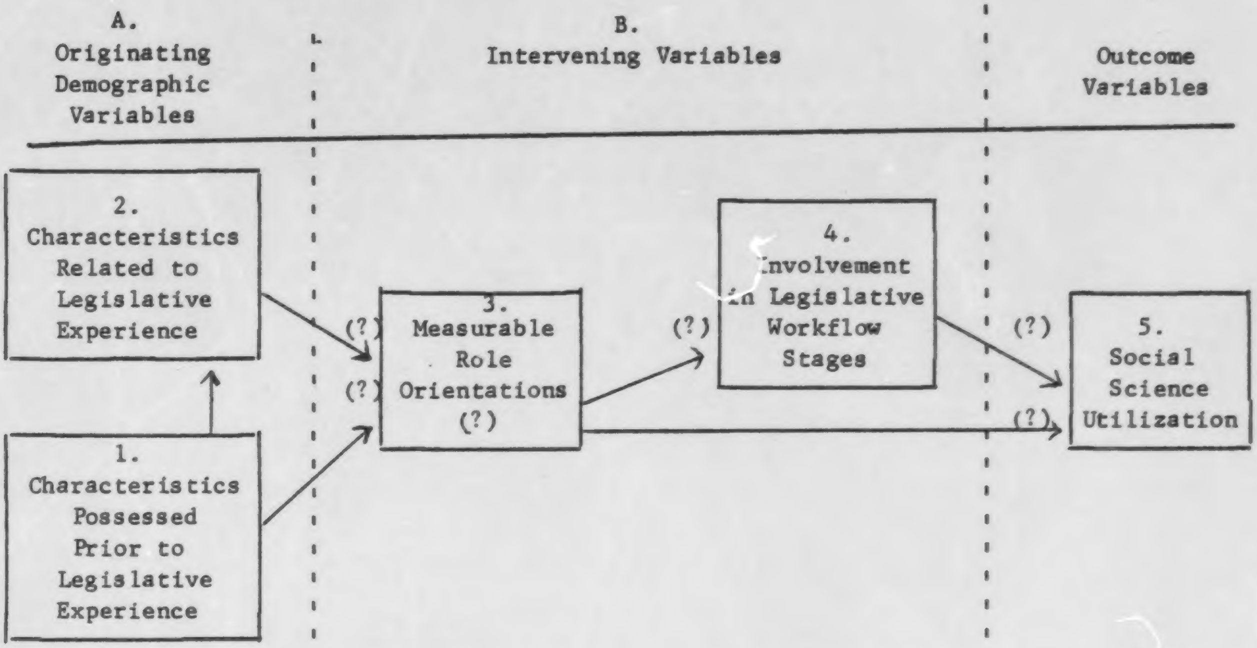
As described in the previous chapter, three distinct sets of data were available for answering these questions: 1) demographic variables related to individual backgrounds and legislative work roles, 2) the Legislative Decision Making Resource Rating Scale (RRS) scores for each respondent, and 3) tape recorded, semi-structured interviews of 20 minutes to approximately 1½ hours in length. Both statistical and non-statistical procedures were used to analyze this data. The demographic and RRS data were susceptible to statistical manipulation. Content analysis, based on a search for key conceptual categories, critical event descriptions and substantive themes rather than statistical regularities, was used to interpret the recorded interviews. The following paragraphs briefly describe the analytic procedures used.

Scoring and Analysis of the RRS Data

Resource Rating Scale scores for each respondent were created as follows: 1) For each bi-polor contrast checked by a respondent a positive score was assigned to the item nearest the respondent's "X" and a negative score to the item farther from his/her "X." If the respondent's mark was placed in one of the spaces toward the center of the line separating each item pair scores of + 1.0 and - 1.0 were assigned. If the mark was on a space near the end of the line, scores of + 2.0 and - 2.0 were assigned. Skipped items or items marked exactly at the mid-point were scored with zeros. 2) All scores for

Figure III

Hypothesized Relationships Among the Major Theoretical Constructs Connecting Legislative Role-Orientations and Legislative Workflow Involvement with Social Science Utilization


A.
Originating Demographic Variables
B.
Intervening Variables
Outcome Variables
2.
Characteristics Related to Legislative Experience
1.
Characteristics Possessed Prior to Legislative Experience
(?)
(?)
3.
Measurable Role Orientations
(?)
(?)
4.
Involvement in Legislative Workflow Stages
(?)
(?)
5.
Social Science Utilization

each of the 36 individual items appearing on the RRS instrument were then summed algebraically to create a total score for each item. Note that items related to the four authority mode domains and the four mechanism for decision domains each appear a total of three times on the instrument (since each is evaluated in a polar contrast with items from each of the other three options in the same domain). Items from the reference group and decision style domains only appear once, however, since there was only one contrasting orientation in each of these two domains. Thus, the range of possible scores for each authority mode and decision mechanism item is from -6.0 to +6.0, while the range for reference group and decision style items is only from -2.0 to +2.0. 3) Next scores for the three items in each of the 12 RRS sub-scales were algebraically summed to create a set of 12 sub-scale scores for each respondent. Note that the authority modality and decision mechanism sub-scales have a possible range of scores from -18.0 to +18.0 (3 times -6.0 to 3 times +6.0), while the reference group and decision style sub-scales have ranges of only -6.0 to +6.0 (3 times -2.0 to 3 times +2.0). Also note that the instrument and scoring procedure yield ipsative scores for categories within each of the four major orientation domains. That is, the sum of each respondent's scores on the four authority categories will always equal zero; as will sums for the decision mechanism sub-scales, the reference group sub-scales and the decision style sub-scales. This reflects the fact that the RRS instrument asks respondents compare each item within an orientational domain only with items representing each category of that particular domain. The dominance of any one authority modality, decision mechanism, reference group type or decision style is reflected when a respondent identifies items within that category as more important than items representing other possible orientations within the same domain. The instrument does not ask respondents to evaluate authority orientations in relation to reference group orientations, or to make any other cross-dimensional choices. Statistically, this means that the RRS instrument itself forces respondents to provide us with correlated answers for all categories within each domain (negatively correlated because positive scores for one category are always accompanied by negative scores for another), but leaves completely open the possibility for correlations among the four major domains or dimensions constituting a legislative orientation. If, for example, respondents identify inside reference groups as important for decision making they must necessarily view outside groups as less important, but are free to adopt any of the different authority mode, mechanism for decision or decision style options along with this "insider" orientation. Hence correlation of RRS scores across subscales drawn from different orientational dimensions can tell us a great deal about the tendency of one orientation element to be associated with others, but correlations within each of the four major dimensions can only be interpreted in relation to the expected negative correlation resulting from the instrument design. In fact, items in each of the reference group and decision style domains are forced to have a perfect negative correlation ($r = -1.0$) and and thus will provide us with no independent information about orientational options within these domains.

The reason for adopting this somewhat complicated approach to measuring and scoring legislative role orientations is simple and important. Since each respondent was forced to provide us with a comparative evaluation of all categories within each orientational domain, only a consistent adoption of one orientational perspective across the three items in the sub-scales will produce an overall mean score that is significantly different from zero for an individual and only group agreement on the importance of particular categories within the major orientational domains will produce mean scores different from zero for the entire sample or any particular sub-group. In other words, the ipsative quality of the sub-scales within each major orientational domain makes it possible for us to draw important conclusions about the tendency of our respondents to recognize the relative importance of the various orientational categories within each domain. We expected this relative weighting of related orientation categories to be of decisive importance in predicting respondents' legislative decision-making behavior in general and social science utilization in particular. Moreover, the ipsative scaling approach minimizes (though, of course, does not eliminate entirely) the possibility that orientation scores are the result of instrument characteristics (i.e., measurement error) rather than real commitments by our respondents.

Once the RRS sub-scale scores for each respondent were generated, statistical analysis of the relationships among the different scores was undertaken. Comparisons among the means and standard deviations for all sub-scales reveals the extent to which all respondents tend to agree on some aspects of their orientations toward the legislative decision-making process, despite important individual and sub-group differences. After examining the mean scores for the entire sample, we investigated the product moment correlations among the sub-scales in order to determine the extent to which adopting an orientation within one domain tended to be related to specific orientations within the other three major dimensions of a legislative role orientation. The results of these two statistical procedures are presented in Section B, below (see discussion of Tables 5 and 6).

Analysis of the Demographic Variables

Scoring respondents' answers to questions regarding their demographic backgrounds and personal experiences was fairly straightforward and is described in Chapter IV, above. Analysis of the relationship between these variables and Resource Rating Scale scores, however, required complex and rather sophisticated statistical techniques. It could reasonably be argued that these statistical techniques are more sophisticated than our data deserve, given the extent to which the sample was non-random, the measuring instruments of unknown reliability, and the data examined with frankly exploratory rather than rigorously hypothesis testing interests in mind. We found that using advanced multivariate statistical techniques to provide straightforward and meaningful interpretations of the data was valuable in clarifying and testing major hypotheses, however, and trust that sophisticated data analysts will recognize that the usefulness of our results outweighs their methodological limitations.

The primary technique utilized for examining relationships between originating demographic variables and legislative orientations measured by the RRS was Multiple Discriminant Analysis. Discriminant Analysis serves to test whether there is a statistically significant relationship between respondents' scores on a cluster of discriminating measures and their membership in particular sub-groups within the sample. One variable (designated the "criterion" variable) is used to create sub-groups within the total sample and then a set of "discriminant functions" is mathematically derived for a set of "discriminating variables" such that a weighted mean score (or "centroid") for each sub-group reflects the extent to which unique responses by members of that group distinguish them from the typical responses of the other sub-groups. Discriminant Analysis then tests whether the differences among individuals within each sub-group is relatively large or small compared to the differences between the groups. If between group differences are comparatively large, the discriminant functions are said to significantly discriminate among the sub-groups. A test of the extent of that discrimination is then made, and an interpretation of its substantive meaning undertaken. In our data analysis thirteen different demographic measures were utilized as criterion variables to cluster our respondents into different types of sub-groupings. Thirteen different discriminant analyses were used to test whether there is an association between these different ways of grouping the respondents and their legislative role orientations as reflected in RRS scores.

Demographic factors used in this way were of three different types (See Table 7). The first type consists of nine demographic characteristics describing attributes of the respondents which existed prior to their legislative experiences (these include: sex, age, educational attainment, political party membership, political ideology, occupation, military service, prior elective office, and ethnicity). A second type of criterion variable consists of factors operative both before and during the respondents' legislative experiences. The two criterion variables in this group are: state of residence and the issue areas addressed during interviews. A third type of criterion variable are those which affect respondents only after their entry into the legislative decision-making process. Seniority among legislators and the legislative work role occupied by each respondent represent these factors.

Initially all discriminant analyses were performed using the Statistical Package for the Social Sciences (Nie, et al., 1970) "direct" method. This means that all RRS sub-scales (except for statistically redundant "outside" reference groups and "bargaining" decision style sub-scale scores) were entered simultaneously in testing for significant differences between sub-groups. This direct approach was used for two reasons. First it is, statistically speaking, a somewhat more conservative approach than any of the various "step-wise" approaches which capitalize on chance to the extent that non-discriminating variables are eliminated from the analysis allowing smaller differences between sub-groups to be identified as statistically significant (due to the increased number of degrees of freedom assigned to the error variance). The second and more important reason for using the direct method lies in the fact that our purpose in using the discriminant analysis approach was to determine the relative importance of each orientation factor in describing differences between various sub-groups within our sample. The direct method, by entering all RRS sub-scales simultaneously, yields discriminant function coefficients which rank each sub-scale in relation to all others.

One exception to this general approach was our re-analysis of differences between ethnic majority and minority respondents. Because many recent educational policy issues have been explicitly concerned with the interests of ethnic minorities we wanted to explore in some detail any differences in legislative orientation which might exist between the predominantly caucasian majority and the small group of ethnic minority members in our sample. This analysis utilized a stepwise discriminant analysis (using a Wilks lamda criterion for entering variables into the analysis) to identify the three RRS sub-scales which significantly discriminate between ethnic groups.

Following the discriminant analyses used to interpret all demographic variables, we applied multiple regression analysis to determine the extent to which seniority among the members of the legislature is related to systematic shifts in their role orientations. The stepwise regression routine from the Statistical Package for the Social Sciences was used for this analysis.

Finally, in order to determine whether differences in orientations arising from involvement in different legislative work roles as well as from participation in different state legislatures might be obscuring expected differences in orientation toward different legislative issue areas we undertook a series of three-way analysis of variance studies, successively examining the simultaneous effects of legislative work role, state of residence, and issue area on each of the RRS sub-scales. This analysis substantially confirmed the discriminant analyses with regard to state and legislative work role differences, and identified three statistically significant, but weak, differences in orientations toward various issues.

Analysis of Recorded Interview Data

Content analysis of 160 recorded interviews held during the second year and the 26 interviews recorded during year I was undertaken with four distinct purposes in mind. First, as described in Chapters II and III, we utilized the interview data to check and refine our conceptualization of the four stages in the legislative workflow and our understanding of the ways in which reference group, decision style and authority modality orientations function as the basic dimensions of every legislative actor's approach to decision-making. Second, we compared role-orientations expressed within the interviews with RRS scores for typical members of various legislative work role groups in order to confirm and improve our substantive understanding of the statistical findings related to important differences between typical members of the different work role groups. Third, we examined the relationship between particular expressed role orientations and the involvement of respondents with specific stages in the legislative work flow in order to interpret the relationship between these two basic constructs. Fourth, we examined orientations toward, and knowledge of, social science research (as well as other forms of expertise) among the respondents with a view toward determining both when and how social science appears useful and relevant for legislative decisions and also whether there is an identifiable relationship between a positive view of social science utilization and more general legislative role-orientations or involvement with particular stages in the decision work flow.

Our content analysis procedures followed a pattern typical for such interview based field studies. About a third (52) of the 160 taped interviews were reduced to verbatim transcripts (creating a total of over 600 pages of single spaced typed transcripts). These were subjected to an intense search for characteristic words and phrases which could be taken as representative of the universe of discourse (or natural language system) of typical participants in state legislative decision-making. Passages containing vivid expressions of typical concepts, themes, or viewpoints were cut from copies of the transcripts and mounted on 5" x 8" file cards so that they (along with analytical notes accompanying them) could be sorted and re-sorted into clusters representing common viewpoints and/or contrasting expressions of various role orientations and decision stage involvements. As the detailed analysis of the limited sample of transcribed interviews was under way, untranscribed tapes were reviewed for corroboration and/or correction of the emerging concepts.

Two possible limitations on the comparability and ultimate reliability of our taped interviews should be noted. First, we were interviewing relatively high status, politically and socially sophisticated and verbally aggressive individuals. Furthermore the length of time available for any given interview was frequently unclear at the start of the interview and several interviews were interrupted by various kinds of "emergency" concerns which intruded into the flow of questioning. Consequently the ability of our project interviewers to secure and maintain control over the direction and subject matter covered in each interview was somewhat limited. Especially when respondents had strong views about what we *should* be looking for, or had little interest in or understanding of our research, the interviews became hard to control. Of course, much was learned from these problems of interview control, since they reflect respondents role-orientations every bit as much as do direct responses to our questions. Sometimes, however, the role-orientations reflected in problematic interviews were not related to the issues of legislative decision-making and social science utilization which are central to our study.

A second limiting factor in our interview data is the fact that we utilized four different field interviewers, only one of whom had prior experience with this type of research. Despite substantial training in interview technique and in the objectives of the research, the personal interests of each interviewer tended to intrude into the interviews. Moreover, the development of sophistication and experience in the field is reflected in each interviewer's later recordings. This problem was substantially controlled by treating the entire interview (not just the responses of the legislative actor) as the data for content analysis. That is, we treated themes and responses as comparable only if they arose in the context of similar inquiries. Of course, this meant that some interview material containing intriguing concepts or insights had to be ignored in our analysis because we had no comparable data from other respondents.

Despite these two limitations on our recorded interview data, however, we are confident that, though analysis was sometimes complicated primary conclusions which are presented in the remainder of this chapter have not been compromised.

B. LEGISLATIVE ROLE ORIENTATIONS AND THEIR ORIGINS

In this section fourteen major findings regarding the nature and origins of legislative role orientations will be discussed.

Overall Means and Standard Deviations. Our first insight into the legislative role orientations of respondents is found in the overall mean scores and standard deviations for each of the twelve Resource Rating Scale sub-scales presented in Table 5. As indicated previously, the mean scores for the four authority sub-scales (Values, Expertise, Legality, and Friendship) are ipsatively related (i.e., they sum to zero because positive scores on one scale are always accompanied by negative scores on another scale). Consequently the mean scores measure the overall agreement among all respondents on the rank ordering of the four authority modalities as bases for defining and resolving education policy decisions. Note that the t-test scores shown in Table 5 indicate that all of the mean scores are significantly different from zero. This means that our respondents clearly believe that legislative

Table 5

Resource Rating Scale (RRS) Sub-Scale
Means (Standard Deviations)

			t-score $(\bar{X}\neq 0;N=177)$	p <
AUTHORITY SCALES				
Values	5.02	(5.74)	11.60	.001
Expertise	1.34	(4.65)	3.82	.001
Legality	-2.95	(4.86)	8.05	.001
Friendship	-3.41	(6.44)	7.02	.001
REFERENCE GROUP SCALES				
Insider	-0.49	(2.57)	2.53	.012
[Outsider	0.49	(2.57)]		
STYLE SCALES				
Analysis	-0.43	(2.85)	2.00	.047
[Bargaining	0.43	(2.85)]		
MECHANISM SCALES				
Inside Analysis	3.17	(5.72)	7.35	.001
Inside Bargaining	2.03	(5.21)	5.17	.001
Outside Analysis	-0.72	(3.99)	2.39	.05
Outside Bargaining	-4.49	(4.21)	14.15	.001

decision-making is more frequently based on value (Mean = 5.02) and expert (Mean = 1.34) grounds than on legal (Mean = -2.95) or friendship (Mean = -3.41) considerations. The mean score for value based authority is not only greater than zero, it is also significantly higher than that for expertise ($t = 6.61$; $p < .001$). The difference between the legal and friendship sub-scale means is not statistically significant, however, indicating that on the average these two modes appear to be about equally less useful than values or expertise for making educational policy decisions.

Recalling the specific items utilized to generate these sub-scale scores (see Table 2), we can see that individuals involved in legislative decision-making tend to see themselves as engaged primarily in defining the public good or resolving problems of public morality and values. To a lesser extent they see legislative policy issues as a matter of identifying and enacting adequate problem solutions or maintaining appropriate and effective programs capable of realizing the public good once it has been identified. These considerations are identified by our respondents as more important than either the interests of particularly influential individuals and groups or the need to maintain established legal patterns.

The second set of ipsative RRS sub-scales shown on Table 5 are those involving orientations toward reference groups. As the table indicates, our respondents see outside reference groups (e.g., constituents, interest groups, lobbyists) as somewhat more important for legislative decision-making than inside reference groups (e.g., chamber leadership, individual members of the legislature or staff). For the total sample, however, this preference for outside orientations is quite modest as indicated by the fact that a t-test for determining whether this sub-scale mean is different from zero gives a value of only 2.53 (p = .012).

Overall mean scores for the decision-making style sub-scales show that our sample has an even more modest but still statistically significant perception that bargaining approaches to decision making are more frequent than analytic ones. As seen in Table 5, the bargaining sub-scale received a mean score of +.43 which yields a t-score of 2.00 (p = .047). This means that our sample views legislative decisions as somewhat more heavily influenced by political accommodation and compromise than by problem analysis or sophisticated discussions of alternative policy solutions.

Mean scores on the four RRS sub-scales related to various mechanisms for decision-making reveal fairly strong orientations toward the importance of these factors in the policy making process. Our respondents clearly ranked the inside mechanisms, such as staff or committee work, above the outside mechanisms, such as pressure from the governor's office, constituency interests, interpretations by executive agencies, etc. (See Table 2 for the specific items used in these sub-scales.) While each of the four mean scores on the decision mechanism sub-scales are significantly different from each of the others in this group, the extent to which outside bargaining mechanism items (mean score = -4.49) were rejected is striking. The specific items reflected in this rejection are:

19. Pressure from the Governor's Office
20. Support from Influential Groups
21. Balancing Budget Demands of Various Groups

In sum. The significance of the twelve overall mean scores on the RRS instrument could be summarized as follows:

> Major Orientation Finding #1: When asked to identify the factors most helpful in defining and resolving educational policy issues, key legislative actors indicate that the primary bases of authority for their decisions lie in the area of public values or goals, secondarily in terms of expert solutions to problems, with maintenance of established legal principles and responsiveness to influential interest groups, ranked as less important. They believe that decisions are generally made through reliance on decision mechanisms located within the legislature itself. They believe that these decisions are guided by reference to groups outside the legislative arena, and they feel that decision making is somewhat more a matter of bargaining than of policy problem analysis.

In addition to assessing the statistical reliability of these orientation elements, the means and standard deviation scores from the RRS can also be utilized to assess the extent or intensity of our respondents overall commitment to the various orientating perspectives. By calculating the ratio of the variance of the mean scores in each domain to the total variance of all individual scores we can get a measure of the proportion of the total variance in all responses which is shared by the members of total sample. That is, the ratio of mean score variance to total variance provides a measure of the extent of total sample agreement on all items. Twenty-eight percent of the variance in the Authority Mode sub-scales is shared by the total sample (leaving the remaining 72% of the variance in individual or sub-group differences). By contrast, only about 2% of the Reference Group sub-scale variance is shared and only slightly over 1% of the Decision Style sub-scale variance is reflected in the mean scores. Shared variance in Mechanism for Decision sub-scales is a substantial 27% of the total variance reflecting an intensity of shared beliefs regarding these items comparable to those in the Authority Mode sub-scales. Hence, the RRS survey instrument has identified solid agreement within our respondent group on the importance of certain authority bases and specific mechanisms for decision, but only a small amount of overall agreement in the other two domains.

Correlations among RRS Sub-scales. A second set of powerful insights into the meaning of our RRS data can be garnered from a study of the product moment correlations among various sub-scale scores taken singly and in certain pairs. Table 6 presents the matrix of Pearson product moment correlations for each of the separate sub-scales (in the top half of the table) and for selected summed pairs of scores (in the bottom half of the table). Note that only one decision style sub-scale (Analytic) and only one reference group sub-scale (Inside) are presented in Table 6. Because the ipsative scaling system insures perfect negative correlation between each of these sub-scales and the other option in the same domain, (i.e., the correlation between Analytic and Bargaining style = -1.0; as is the correlation between Inside and Outside reference groups) no additional information is contained in the other two sub-scales. Correlations for the Bargaining sub-scale can be read from the table by simply changing the sign of the coefficients listed for the Analytic style sub-scale. Similarly, Outside reference group correlations have the same magnitude and the opposite sign of the Inside reference group sub-scale coefficients in Table 6.

The two clusters of coefficients enclosed in bold lines on the table are derived from inter-correlations among the four Authority Modality and

Table 6

CORRELATIONS AMONG RRS SUB-SCALES

	Authority Scales				Mechanism Scales				Style Scales	Reference Group Scales
	Values	Frnd	Legl	Expt	In Anal	Out Anal	In Barg	Out Barg	Anal	Inside
Val.		-.49	-.37	-.17	.30	.08	-.18	-.26	.31	-.28
Frnd	-.49		-.32	-.45	-.64	-.02	.34	.46	-.56	.39
Lgl	-.37	-.32		-.15	.06	-.09	.05	-.06	-.02	.05
Exp	-.17	-.45	-.15		.44	.04	-.30	-.25	.42	-.25
In Anal	.30	-.64	.06	.44		-.21	-.44	-.61	.56	-.24
Out Anal	.08	-.02	-.09	.04	-.21		-.53	-.01	.13	-.39
In Barg	-.18	.34	.05	-.30	-.44	-.53		-.13	-.48	.42
Out Barg	-.26	.46	-.06	-.25	-.61	-.01	-.13		-.29	.17
Anal	.31	-.56	-.02	.42	.56	.13	-.48	-.29		-.33
Inside	-.28	.39	.05	-.25	-.24	-.39	.42	.17	-.33	
IA+OA	.33	-.60	-.00	.42					.59	-.47
IB+OB	-.33	.60	.00	-.42					-.59	.47
IA+IB	.14	-.32	.11	.16					.12	.14
OA+OB	-.14	.32	-.11	-.16					-.12	-.14
V+F					-.38	.05	.19	.24	-.30	.15
L+E					.38	-.05	-.19	-.24	.30	-.15
V+L					.34	-.00	-.13	-.30	.28	-.22
F+E					-.34	.00	.13	.30	-.28	.22
V+E					.56	.09	-.36	-.40	.55	-.41
L+F					-.56	-.09	.36	.40	-.55	.41

the four Decision Mechanism sub-scales. Care must be exercised in interpreting these coefficients because the ipsative scoring system insures that, on the average, correlation between each sub-scale and each of the other three sub-scales within each of these domains will be -.33. Thus the r of -.32 found between the Friendship and Legal Authority Mode subscales is just about what should be expected. On the other hand, the nearly zero correlation between the Outside Analysis and Outside Bargaining sub-scales in the Mechanisms domain (r = -.01) is substantially higher than expected and reflects a decided tendency for respondents to hold similar orientations toward both of these outside (i.e., constituency oriented) mechanisms. Given a sample size of 177, any correlation within the Authority or Mechanism domains falling outside the range -.19 to -.46 differs from the expected value of -.33 at a statistically significant level.

Looking at correlations within the Authority Modality domain, we note that there are three correlations which diverge significantly from the expected value of -.33. Values and Friendship scores, with an r of -.49 have an inverse relationship which is stronger than expected, indicating that respondents who recognized values as important in directing decisions tended to reject friendship more strongly than either legal or expert authority and vice versa. Recognition of expertise is associated positively (i.e., less negatively than expected) with both the value (r = -.17) and legal (r = -.15) modes of authority. These relationships, of course, are consistent with the pattern of mean scores discussed above, and confirm the tendency of individuals to see value orientations as closely associated with expertise, unrelated to legality and substantially in opposition to friendship bases for decision.

Within the Mechanisms for Decision cluster of sub-scales, four of the six correlation coefficients differ significantly from the expected -.33. Outside Bargaining scores tend to associate less negatively than expected with Outside Analysis (r = -.01) and Inside Bargaining (r = -.13) scores, while having a strong negative relationship to Inside Analysis (r = .-61) mechanism scores. The Outside Analysis scores which are more positively related to Outside Bargaining than expected are also negatively associated with Inside Bargaining scores (r = -.53). These relationships, as with the authority sub-scales, are consistent with the pattern of mechanism sub-scale mean scores discussed previously.

When we look at the correlations between sub-scales drawn from different orientation domains there are no a priori expectations regarding correlation coefficients. Hence any coefficient with a value of ± .15 or greater is statistically significant. Several important relationships of this magnitude are found in Table 6. First, orientation toward an analytic decision-making style is positively associated with the perception that values and expertise are important resources for decision, while a bargaining style orientation is associated with the friendship authority mode. Legal authority, while not significantly related to either style tends slightly toward the bargaining orientation. Similarly, those who recognize the importance of inside reference groups tend to see the importance of the friendship authority base, while those oriented toward outside reference groups find values and expertise to be most powerful.

The substantive significance of these correlations can be summarized in three major findings:

> Major Orientation Finding #2: In terms of Reference Groups--a legislative actor adopting a positive orientation toward Inside groups tends to embrace the Bargaining style of decision-making, to appreciate Friendship and Legal modes of authority, and to rely on both Inside Bargaining and Outside Bargaining mechanisms for decision. By contrast, if a legislative actor orients toward Outside groups he/she tends to adopt an Analytic style, to appreciate the importance of Value and Expert modes of authority, and to rely on Inside Analysis and Outside Analysis mechanisms for decision making.
>
> Major Orientation Finding #3: In terms of Decision Style orientations--legislative actors adopting an Analytic style tend to appreciate the importance of Value and Expert modes of authority and to believe that both Inside Analysis and Outside Analysis mechanisms for decision are important. Conversely, adopting a Bargaining style is related to emphasis on the authority of personal influence, i.e., (Friendship) and appreciation for Inside Bargaining and Outside Bargaining mechanisms.
>
> Major Orientation Finding #4: In terms of Authority Mode orientations--appreciation of Value based authority is related to an embrace of Outside reference groups, an analytic style, and use of Inside Analysis mechanisms. Acceptance of the importance of personal Friendship influence is related to identification with Inside reference groups, Bargaining approaches to decision making, and reliance on Inside Bargaining and Outside Bargaining mechanisms. Appreciation of Expert authority is related to identification with Outside reference groups, an Analytic style, and reliance on Inside Analysis mechanisms. Within our sample, however, orientations toward the Legal authority mode did not display any clear relationship to Reference Group, Style, or Decision-making Mechanism orientations.

Differentiating Legislative Decision Orientations

Having discovered that there are both significant agreements and substantial variations among our respondents in their views regarding the orientation factors which most effectively contribute to legislative decision-making we undertook a series of exploratory data analyses aimed at determining what factors in the backgrounds or experiences of our subjects accounted for differences in their orientational perspectives. As indicated in the preceding section, thirteen different demographic variables were each used as criterion variables to separate respondents into various types of sub-groupings. Each set of sub-groupings was then submitted to multiple discriminant analysis to determine whether variations in the legislative decision-making orientations measured by the RRS were related to the personal histories, characteristics or social backgrounds of respondents. The overall significance of the data presented in Table 7 can be summarized as:

> Major Orientation Finding #5: Among the demographic variables collected in our research: 1) none of those factors operative primarily before an actor enters into the legislative decision-making process (i.e., sex, age, education, political party, political ideology, occupation, military service, prior elected office, or ethnicity) are significantly related to legislative role-orientations measured by the Resource Rating Scale. 2) Of the two factors operating both before and after entry into legislative decision making, state of residence (and therefore of legislative participation) powerfully predicts responses to the RRS instrument. The substantive content of specific legislative issues discussed in our interviews, however, does not appear to be strongly related to legislative decision orientations. And 3) of the two factors operating only after entry into the legislature, legislative work roles have a powerful effect on legislative decision orientations. Seniority in the legislature, however, does not appear to have a dramatic effect on orientations.

Pre-legislative characteristics. To our surprise, not one of the nine demographic factors reflecting attributes possessed by the respondents prior to their entry into the legislative decision-making arena produced a statistically significant discrimination among respondents' decision making orientations. As shown in the top portion of Table 7, χ^2 values for all of the

Table 7

Direct Discriminant Analysis of RRS Sub-Scales Using Selected Demographic Variables as Criteria for Grouping Respondents

Group Variables	χ^2 for 1st Fcn.	df	p	Canonical Correlate
A. Factors Operative Before Entry into Legislative Decision Making				
1. Sex	12.39	10	.260	.265
2. Age	25.05	20	.199	.323
3. Education	33.50	30	.301	.351
4. Political Party	12.57	10	.249	.284
(Legislators Only)	(6.51)	(10)	(.771)	(.276)
5. Political Ideology	21.28	20	.381	.290
6. Occupation	36.50	30	.192	.467
7. Military Service	7.16	10	.710	.211
8. Prior Elective Office (Legislators Only)	16.66	10	.082*	.431
9. Ethnicity (See also Table 13)	9.18	10	.515	.229
B. Factors Operative Both Before and After Entry Into the Legislature				
10. Issue Areas (Programatic vs Organizational)	6.27	10	.792	.190
11. State of Residence and of Legislature (See also Table 8) (i.e. Ariz, Cal, Ore)				
Fcn. #1	53.52	20	.000**	.477
(Fcn. #2)	(9.77)	(9)	(.370)	(.237)
C. Factors Operative After Entry into Legislative Decision Making				
12. Seniority (See also Table 9) (Legislators Only)	24.92	20	.205	.544
13. Legislative Work Roles (See also Tables 10A,B,C,D)				
Fcn. #1	177.82	60	.000**	.655
(Fcn. #2)	83.84	45	.000**	.493

discriminant functions based on respondents' sex, age, education, political party affiliation, political ideology, occupation, military service, prior elective office and ethnicity ranged from 6.51 to 36.50. In no case are these χ^2 values large enough to permit rejection of the null hypothesis (of no significant difference in orientation) at the .05 level or better. Only the test of differences between those legislators with and those without prior experience in an elective office reached even the .10 level of significance which would be required to justify suggesting that a demographic factor may play a part in shaping the decision making orientations of legislative actors.

Issues. As shown in Part B of Table 7 we examined two factors whose effects are important both before and during a person's participation in the legislative process. Factor 10 grouped the respondents according to the issues discussed in their tape recorded interviews (and also utilized to focus their attention on the alternative orientation factors presented in the RRS instrument). As previously indicated (see Chapter IV), we interviewed respondents on one or more of six different educational policy issues: basic skills, categorical programs, finance, governance restructuring or reform, personnel, and/or special education. For purposes of multiple discriminant analysis there were too few responses to some issues for meaningful discrimination. Consequently, we collapsed the respondent groups into two larger categories: programmatic issues (basic skills, categorical programs and special education) and organizational issues (finance, governance, and personnel). As shown in Table 7, clustering respondents in this way was not associated with significant differences in their responses to the

RRS orientation sub-scales. This failure to produce significant discrimination between different types of issues was somewhat surprising in light of previous research findings which emphasize the importance of issue differences in shaping legislative decision making processes. (See discussion in Chapter II, above.) Consequently we undertook a more thorough exploration of possible differences between issues by controlling for the effects of potentially confounding variables in a 3-way analysis of variance design. Discussion of that exploratory analysis will be postponed, however, until the other variables presented in Table 7 have been examined. (See the discussion of Table 12, below.)

State. When our sample was divided into sub-groups based on their state of residence (and legislative experience) one highly significant discriminant function $\chi^2 = 53.52$; df = 30; $p \doteq .000$) was produced, (see Factor 11, Table 7). A second discriminant function was not statistically significant $\chi^2 = 9.77$; df = 9; p = .370). If interpreted cautiously, however, it offers some additional insights into differences among respondents representing the Arizona, California, and Oregon legislative decision making systems.

The discriminant function coefficients and controids for the three states are presented in Table 8. The group centroids are displayed graphically in Figure IV. Note that the largest RRS sub-scale coefficient (-.856) in the first function is that associated with Inside reference group orientations. Also note that no other coefficient is as large as 1/2 this magnitude, thus indicating that the reference group sub-scale accounts

Table 8

Direct Discriminant Analysis of RRS Sub-Scales
Using State as the Criterion
Variable for Grouping Respondents

	Discriminant Function Coefficients	
RRS	Fcn #1 (R=.48)	Fcn #2 (R=.24)
Sub-Scales	(χ^2_{20}=53.52; p=.000)	(χ^2_{9}=9.77; p=.370)
Value	-.127	-.041
Friendship	.046	.023
Legality	.348	.230
Expertise	-.231	.302
Inside Ref. Group (not Outsiders)	.856**	-.007
Analytical Style (not Bargainers)	.191	.772**
Inside Bargaining	.189	-.211
Inside Analysis	-.044	-.088
Outside Bargaining	-.322	.039
Outside Analysis	.152	-.385

**Largest Coefficient
*Coefficient at least 1/2 largest

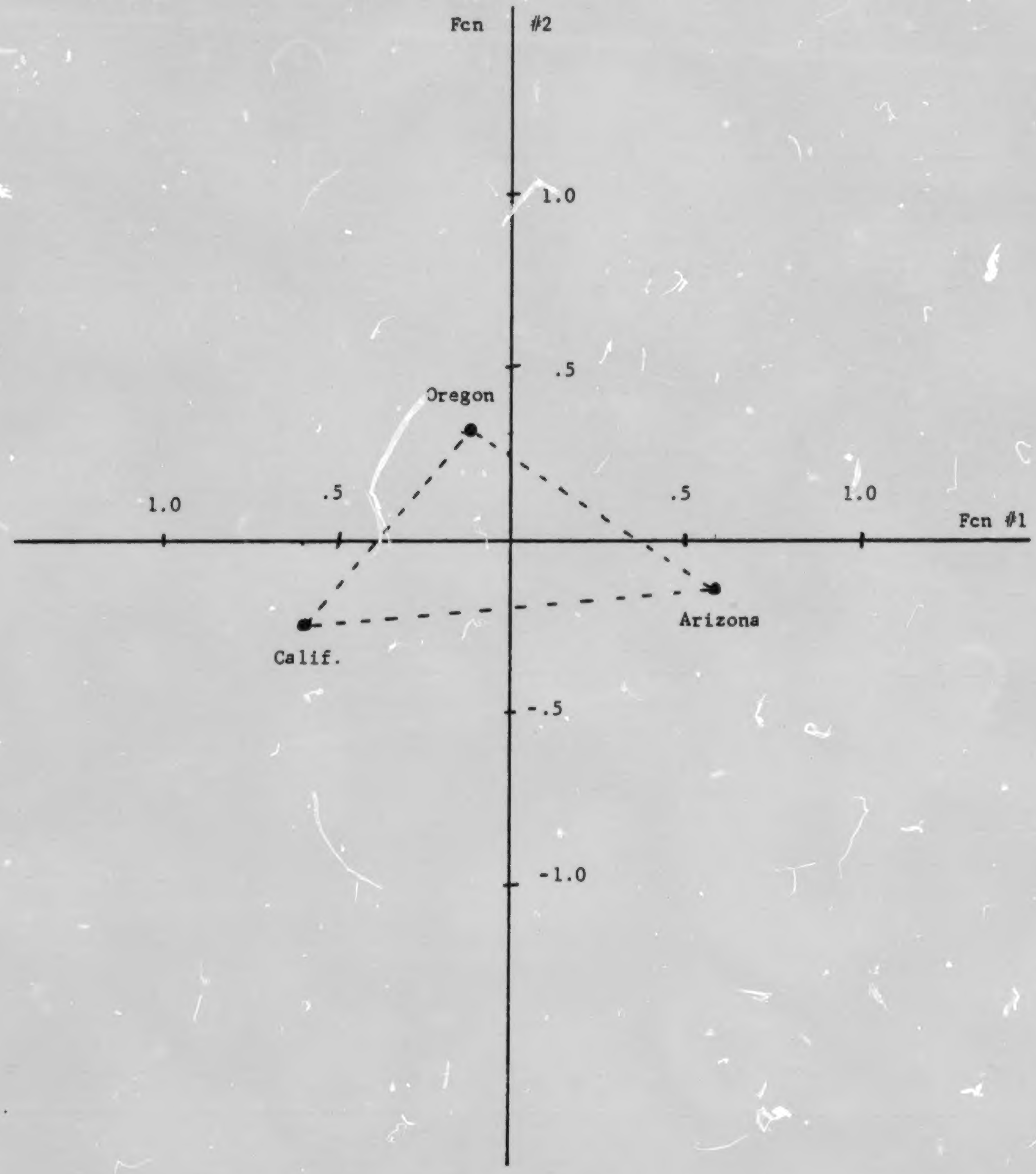
Group Centroids in Reduced Space

	Fcn #1	Fcn #2
Arizona	.580	-.134
California	-.614	-.239
Oregon	-.107	.301

Figure IV

DISCRIMINANT FUNCTION CENTROIDS FOR RESOURCE RATING SCALE (RRS) SCORES, USING STATE OF RESIDENCE AS CRITERION FOR GROUPING RESPONDENTS

(See Table 8)



for most of the differences among the three states represented in our sample. The group centroids reveal that this discriminant function sharply distinguishes Arizona and California respondents, with Oregonians having a near zero centroid of -.07. The strongly negative centroid for California means that respondents from this state favor the view that inside reference groups are more important than outside ones, while Arizona respondents tend to find outside reference groups to be relatively more important. Specifically, this means that California respondents generally gave higher scores to the items:

31. Legislative Factors,
32. Interaction Among Legislators,
and 33. Behind the Scenes Work.

By contrast, Arizona respondents see:

34. Legitimate Public Interests,
35. Interaction with Constituents and Interest Groups,
and 36. Vigorous Public Leadership

as more important factors in legislative decision making.

Coefficients for the second discriminant function shown in Table 8 indicate that the RRS Decision Style sub-scales contribute most strongly to this weaker second order separation among the three states. This second function, as the centroid scores show, distinguishes Oregonions (centroid = .301) from respondents representing California (centroid = -.239) and Arizona (centroid = -.134).

In summary, discriminant analysis applied to the three state groups reveals that:

> Major Orientation Finding #6: Reference Group and Decision Style factors are primarily responsible for differences in legislative orientation among our three states. California legislative actors see decisions as more heavily influenced by inside reference groups while Arizona actors see outside reference groups as more important. Oregon legislative actors, less distinctive on the reference group question are highest in their appreciation of analytic rather than bargaining styles. In keeping with these reference group and style orientations, Californians tend to emphasize reliance on bargaining with outside decision mechanisms while Arizonians tend to emphasize a combination of outside analytic and inside bargaining mechanisms.

Seniority. At the bottom of Table 7 (Part C) are shown two demographic factors which can only affect the orientations of our respondents after they have entered the legislative decision making arena. Although the concept of seniority (Factor 12) applies to both appointed and elected officials, it has a different meaning for the legislative members themselves than for either staff members or lobbyists. In addition to the fact that legislators must win re-election in order to acquire their seniority, they also automatically acquire increased power and authority within the legislative chamber as they achieve this increased seniority. Therefore, we eliminated from the analysis of seniority all the non-legislators. For the discriminant analysis reported in Table 7, we created two groups of legislators--those with more than four years of experience and those having four or fewer years of seniority. This divided those who had won re-election at least once from the freshmen legislators (in legislative chambers with four-year offices) or from freshmen and sophomores (in legislative chambers with two-year terms). As shown on Table 7, this approach to grouping our sample did not lead to a significant discrimination $\chi^2 = 24.92$; df = 20; p = .205). However, we noted that the canonical correlate for this discriminant function was quite large (R = .544) indicating that a substantial amount of orientation variance is related to seniority. We decided, therefore, to take advantage of the fact that seniority is a *continuous* variable (taking on any value from 1 or less to over 30) and submitted the legislator RRS scores to multiple regression analysis using seniority as the dependent variable. The results of this regression analysis are presented in Table 9. As shown on that table, regression produces a multiple R^2 of .237, ($p < .01$) indicating a fairly strong and statistically significant relationship between legislator orientations and their seniority in the legislature. This relationship is dependent primarily upon four of the RRS sub-scales. Two of them (*Inside* Reference Group and *Value* based Authority) have regression coefficients twice their standard errors, and two others (*Outside* *Analysis* mechanisms and *Analytic* decision styles) have coefficients larger than 1.5 times their standard errors.

Substantively, Table 9 supports the conclusion that, as they spend *more* time in office, legislators shift their orientations toward a higher level of appreciation for *outside* reference groups and a higher reliance on *value* based decisions and increasingly believe that *analytic* rather than bargaining approaches are used in legislative decision making. The more senior

Table 9

Multiple Regression of RRS Sub-Scales on Years in Office for Legislators

RRS Sub-Scale	Simple r	Multiple R	Beta Coefficient
Insider Ref. Group	-.36	.36	-.32**
Values	.32	.42	.22**
Inside Analysis	.30	.45	.09
Outside Analysis	-.02	.47	-.18*
Analytic Style	.30	.48	.15*
Friendship	-.27	.49	.11
Inside Bargaining	-.18	.49	-.03
Expertise	.10	.49	.01

** β = at least twice Standard Error

* β = at least 1.5 times Standard Error

Multiple $R^2 = .237$; $p < .01$

members of the legislature also tend to rely less on insights and interpretations provided by lobbyists, executive agencies and constituents in making their decisions. Conversely newer legislators tend to see decisions as made by insiders utilizing bargaining strategies and specific inputs from lobbyists, executives and constituents. These findings can be summarized as,

> Major Orientation Finding #7. Although gross clustering of legislators according to seniority groupings does not yield significant discrimination between new and experienced legislators, regression of RRS sub-scales on legislators' years in office reveals that increasing years in office is associated with orientations which are increasingly based on outside reference groups, acceptance of value based authority, rejection of outside analytic mechanisms and acceptance of an analytic decision style.

Legislative Work Roles. The last demographic variable utilized to divide our respondents into sub-groups was their legislative work roles (Factor 13 on Table 7). This factor was originally utilized for sample selection and initially consisted of seven categories: 1) the elected leadership of each legislature, 2) members of legislative fiscal committees (both taxation and expenditure committees), 3) members of education policy committees, 4) education oriented legislative staff members serving on research staffs, as consultants to Education and Fiscal Committees, or as aides to individual legislators serving on these committees, 5) members of the State Departments of Education with legislative liaison responsibility (including the Superintendent of Public Instruction, 6) members of the Governor's executive staff concerned with education policy matters, and 7) lobbyists and spokespersons for the major education interest groups (teachers, school boards, administrators, PTA's, urban school districts, etc.).

After data collection was completed, however, we found it necessary to make two modifications in our classification scheme. First, we noted that several legislators hold multiple assignments making their assignment to a specific group difficult. In order to create mutually exclusive categories, we treated all elected leaders as leaders regardless of their other assignments, but created a new category for legislators that held appointments on both education and fiscal committees in order to keep the "pure" education and fiscal committee members separated from those holding dual membership. Second, because we were unable to get complete data on any of the governor's staff respondents in Arizona and secured only one complete data set from this group in Oregon, we merged the state department of education staff and the governor's staff respondents into a single executive branch category. This left us with a total of seven distinct work role groups for analysis: 1) leaders, 2) fiscal committee members, 3) education committee members, 4) joint fiscal and education committee members, 5) legislative staff, 6) executive branch staff, and 7) education interest group representatives and lobbyists.

As shown at the bottom of Table 7, this way of grouping our respondents produced two highly significant multiple discriminant functions. The coefficients for these functions and the centroid scores for each of the seven work role groups are reproduced in Table 10A. The centroids are displayed graphically in Figure V (following page 176). This table and figure contain the most important findings of this study.

The magnitude of the relationship between individual work roles within the legislature and responses to the RRS instrument is indicated by the

Table 10A

DIRECT DISCRIMINANT ANALYSIS OF RESOURCE RATING SCALE SCORES USING LEGISLATIVE WORK ROLE AS CRITERION FOR GROUPING RESPONDENTS

Sub-Scale	Significant Discriminant Function Coefficients	
	First Function	Second Function
	$(\chi^2_{60}=177.82; p=.000)$	$\chi^2_{45}=83.84; p=.000)$
VALUES	0.266*	-.119
FRIENDSHIP	0.100	.214
LEGALITY	-0.234*	-.439*
EXPERTISE	0.055	.255
INSIDE REF. GROUPS	-0.383**	.262*
ANALYTIC DECISION STYLE	0.288*	-.146
INSIDE BARGAINING	-0.138	-.506*
INSIDE ANALYSIS	0.366*	.157
OUTSIDE BARGAINING	0.000	.517**
OUTSIDE ANALYSIS	-0.271*	-.166
Canonical Correlate (R)	.655	.493
Canonical R^2	.43	.24 $\Sigma R^2 = .67$

**Largest Coefficient

*Coefficients at least 1/2 largest

Total R^2 for 6 Discr. Fcns. = .88

Group Centroids in Reduced Space (See Figure V)

Group	Fcn. 1	Fcn. 2
Legislative Leaders	-.020	-1.854
Education Comm.	.439	.024
Fiscal Comm.	1.041	.322
Education and Fis. Comm.	.600	- .011
Legislative Staff	-.477	.074
Executive Staff	-.781	.538
Lobbyists	-.664	- .051

size of the canonical correlation (R) between the discriminant function scores for each respondent and the group membership variable. For the two significant functions shown on Table 10A the canonical correlates are .655 and .493 respectively. Squaring the canonical R produces an estimate of the proportion of the variance in individual work-role group memberships which can be predicted from each discriminant function. Thus the first function(with an R^2 of .43)enables us to predict 43% of the work role variations. The second functions (which is derived in such a way as to be completely uncorrelated with the first function) has an R^2 of .24. These two functions together, therefore, can correctly predict 67% of the work role group membership in our sample. Anyone familiar with typical social survey research results will immediately recognize that a relationship of this magnitude is not only of the highest statistical reliability, but that it represents a massive and undeniably important relationship between the objective personal characteristics of individual respondents and their orientations toward the legislative decision making process. We can, without the slightest hesitation, conclude that the particular roles individuals play in the legislative decision-making process has very powerful effects on their perceptions about what factors control the decisions being made. In the vernacular of the political pundit: "Where you "stand" (on the question of how the legislature works) depends on where you "sit" (in the legislature decision making system)." This finding is strengthened even further when we sum the canonical R^2 terms over all of the six statistically independent discriminant functions which can be calculated from this data.

While the remaining four discriminant functions are not statistically reliable for use in describing the differences between work role groups, they do add an additional 22% to our ability to predict work role membership from the RRS scores, bringing the total R^2 for all six work role functions to .88 (88% of the variance).

The substantive meaning of the specific orientations toward legislative decision-making taken by the various work role groups is found by examining the coefficients for each significant function and the centroid scores for each work role group.

The First Work Role Discriminant Function. As seen in Table 10A, the largest coefficient in the first function is the one associated with the Inside reference group sub-scale (coef. = -.383). The negative sign means that a positive function centroid is associated with appreciation for Outside reference groups while a negative function centroid reflects an identification with Inside groups. Associated with this Inside/Outside difference between work role groups are five other RRS sub-scales with coefficients of a size approaching that of the reference group scale. Two of these other scales are the authority sub-scales representing Values (Coef. = .266)and Legality (Coef. = -.234). As indicated by the sign of each coefficient, an appreciation of the legal bases for legislative decisions is associated with an orientation toward reference groups within the legislature, while reliance on values is associated with an outside orientation. Also contributing to the first function's discriminating power is the Analytic decision style sub-scale (coef. = .288). The positive coefficient for this sub-scale indicates that the analytic style is associated with the outside reference group and value based authority orientations. The remaining two large coefficients are associated with the *Inside Analysis* (coef. = .366) and the *Outside Analysis* (coef. = -.271) mechanism sub-scales. Paradoxically, the negative coefficient for the inside reference group orientation is associated with a similar negative coefficient on the *Outside Analysis* mechanisms, while an outside reference group orientation is accompanied by a positive coefficient for *Inside Analysis* mechanisms. This paradox is only apparent, however, and can be easily understood by referring back to the specific items used to create these sub-scales as they are presented in Table 2. An *Inside* reference group orientation means that a respondent finds:

31. Legislative factors

more important than

34. Legitimate Public Interests,

32. Interaction Among Legislators

more important than

35. Interaction with Constituents and Interest Groups,

and 33. Behind the Scenes Work

more important than

36. Vigorous Public Leadership.

Reliance on Outside Analysis mechanisms rather than Inside Analysis ones means finding:

22. Insight Provided by Interest Group Lobbyists

more important than

16. Relying on Adequate Staff Work

23. Interpretations Provided by Executive Agencies,

more important than

17. Deliberations Within Legislative Committees

and 24. Understanding Constituency Interests

more important than

18. Reaching Legislative Consensus through Study and Discussion.

The message of such a set of RRS responses seems quite clear: the legislative actor with this orientation believes that legislative decisions are made by "insiders" meeting in a clubbish atmosphere characterized by intimate give-and-take discussions. The substance of their interactions, however, and the content of the decisions which they make are dependent upon the strength and direction of demands, arguments, and insights provided from outside the legislative arena itself. Such a view represents the embrace of a strong representation role for members of the legislature. That is, this view sees legislators as doing "what they can" for the interests they represent, but still acting in accordance with the norms and limitations of the legislative process itself. Actors with this view believe that legislators have limited powers to control legislative outcomes and that their powers depend largely upon the adequacy of the information and support they get from individuals or groups outside the legislature whom they are trying to represent. The contrary view, held by those who reversed the order of importance for these items, and thus combined high Outside reference group orientations with heavy reliance on Inside Analysis mechanisms, reflects a weak representation view of the legislator. In this view the legislator must return again and again to his public and constituents for guidance regarding desirable policies, but then can rely on colleagues or staff members to hammer out the details of the specific policies that can embody viable solutions to these public policy problems.

The discovery that our respondents link an embrace of Inside reference groups with the belief that legislative decisions are strongly influenced by Outside Analysis mechanisms (and vice versa) suggests that there has been a basic conceptual weakness in much of the research on "delegate" and "trustee" representational orientations originated by Wahlke, et al. (1962)--(see Chapter III). Our data suggest that there are two quite distinct meanings which might be given to the pivotal research question used in these studies. When answering the question: "Do you exercise your own judgment, or follow the desires of your constituents?" legislators might be thinking primarily either about the source of their judgments regarding the desirable goals of public policy, or about the origins of their decisions regarding the means for achieving those goals embodied in specific legislative proposals. That is, legislators may exercise personal responsibility (i.e., trusteeship) over the ultimate purposes of public policy, while feeling a great need to get direct constituent guidance regarding the acceptability or feasibility of specific policy actions. Or, they might reverse these two dimensions and feel that they are obligated to serve as delegates regarding the ultimate interests of their constituents while retaining and exercising a strong trusteeship over the concrete legislative means to be utilized in realizing these interests. In the first instance, the legislators would, no doubt, feel that legislative decisions are controlled by inside reference groups, but would also be strongly influenced by guidance and analysis provided by influence mechanisms such as interest groups, constituents, and executive agencies outside the legislative arena itself. In the second case, the legislators would naturally believe that legislative decisions are controlled basically by the interests of the outside reference groups, but would also be powerfully influenced by the analysis and support provided by key legislators, staff members, and chamber leaders. The strong negative correlations between the reference group sub-scales and the location of the specific mechanisms affecting legislative decisions found in our data suggest that legislative actors _typically_ embrace a delegate orientation toward one aspect of a policy decision which they are making (i.e., accept either the goal _or_ the means from outside the legislative arena), while holding a trustee or personal responsibility orientation toward the other aspect of the decision. This suggests that future research in this arena should seek to identify the two types of _limited trusteeship_ (i.e., trusteeship over goals but not means and trusteeship over means but not goals) and to determine whether these mixed models are not more accurate reflections of legislator role orientation than either the total trustee or total delegate concepts generally utilized in this research. We might even speculate that the need for a "politico" category to describe mixed delegate and trustee responses would be significantly reduced if future research would carefully distinguish between limited and complete trusteeship orientations.

The Second Work Role Discriminant Function. The coefficients for the second discriminant function presented in Table 10A indicate that there is a second (and quite different) way in which the members of various work role groups have unique perspectives on the legislative decision making process. The largest coefficient in this function is the one associated with the Outside Bargaining mechanisms for decision sub-scale (coef. = .517). Nearly as powerful in contributing to this discriminant function are negative coefficients for the Inside Bargaining mechanisms (coef. = -.506) and the Legal authority sub-scales (coef. = -.439). Weaker in contribution, but still substantial is a positive view of Inside reference groups (coef. = .262). A high centroid score on this discriminant function would, therefore, imply that a group views the legislative process as influenced by:

19. Pressure from the Governor's Office

more than

13. Negotiations among Legislators,

20. Support from Influential Groups

more than

14. Legislative Leadership Priorities,

and 21. Balancing Budget Demands of Various Groups

more than

15. Reaching Political Accommodation through Compromise.

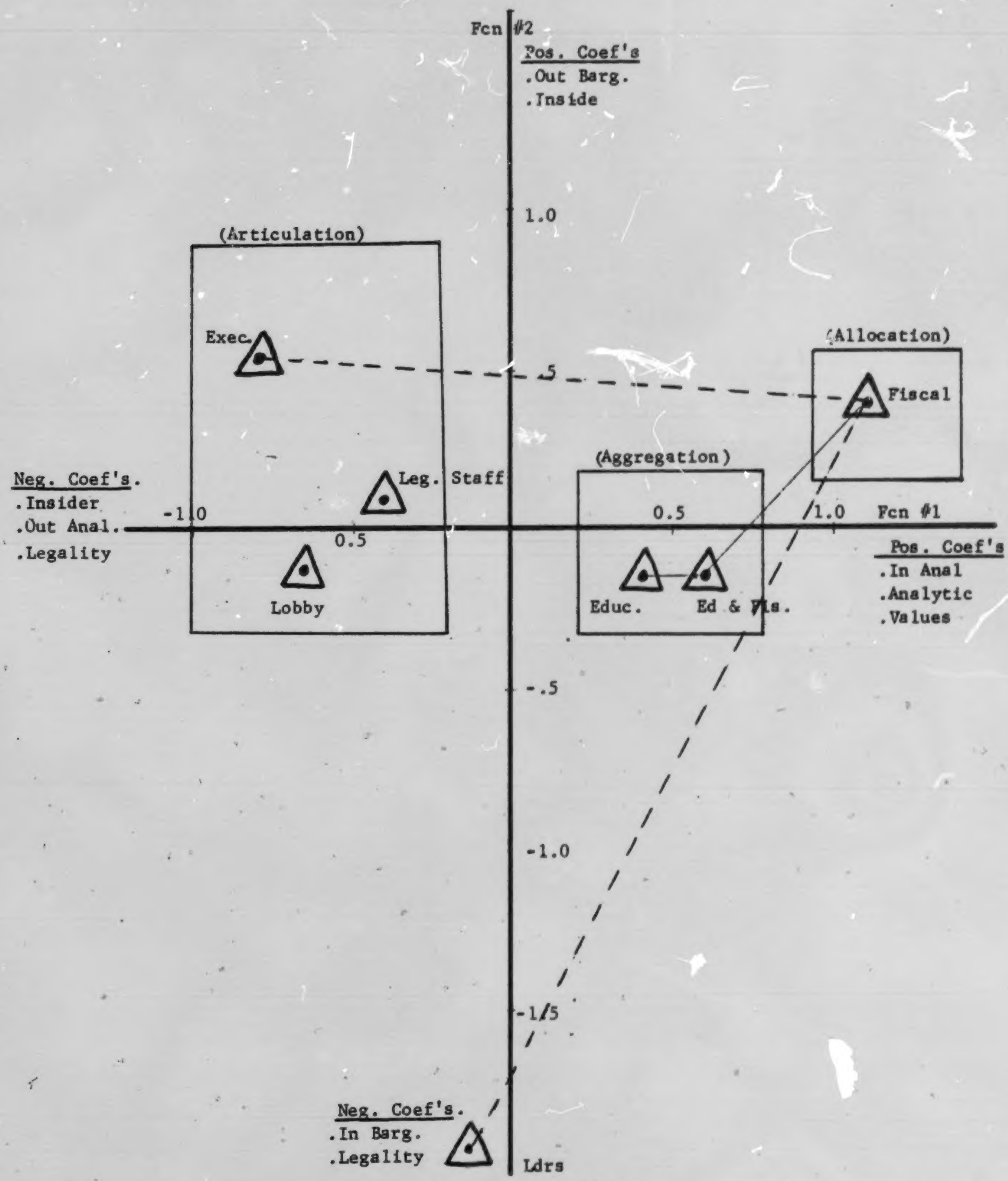
A negative centroid reflects a reversal of this perspective. Positive centroid scores also mean the group rejects legalistic grounds for decision (and weakly embraces the expert and friendship based authority modes). In a paradox similar to the one seen in the first discriminant function, respondents with a positive score on this function combine the belief in the importance of Inside reference groups with a conviction that legislators rely heavily on Outside Bargaining mechanisms for decisions. That is, high scores on this function reflect both a conviction that interactions with constituents or perceptions of the public interest, and a belief that the Governor's office and influential interest groups are powerful mechanisms affecting the outcomes of legislative decision-making. In this case, resolving the paradox requires an understanding of the role of the legislature as a political institution. Acknowledging the power of the governor or of interest groups as basic mechanisms for decision reflects a belief that the legislature is primarily a reactive, conflict resolving, rather than a pro-active, policy originating, body. This leads respondents to feel that legislators close ranks and base decisions on their own rather than public or constituent interests when dealing with powerful outside pressures. By contrast, respondents with a strong sense of the originative power and institutional integrity of the legislature (i.e., those with negative scores on this function) feel that the public interest is served through conflict and vigorous bargaining among legislators. Thus, a negative centroid on this function would indicate support for a view of the legislature as the place where vigorous direct bargaining among legislators, combined with a healthy respect for the importance of legal norms and precedents, operates to create a system of laws that are coherent and to insure that changes in those laws are orderly and manageable.

Work Role Group Centroids. Centroids for our seven work role subgroups on both of the significant RRS discriminant functions are plotted in Figure V. Careful examination of this figure provides several important insights into the relationships among these groups. Note first, that the non-legislator groups all have centroids to the left of the vertical axis (i.e., have negative centroids on the first function), while all of the legislators except the leadership group are on the right (the leaders have a near-zero centroid of -.02). Thus, legislators generally embrace a weak trustee view of their roles -- believing that they depend heavily on interaction with outsiders for the goals and directions of policy, but relying on staff and fellow legislators for guidance regarding the appropriate legislative means for achieving these ends. The non-legislators, by contrast, see the legislators as operating more with a strong trustee orientation in which basic directions are fixed by legislators themselves with outside interest groups only able to provide the limited modifications of those directions which result from advancing technical or detailed arguments in relation to specific proposals which are being considered and adopted. This finding is, of course, neither surprising nor hard to appreciate. Outsiders always feel that they are unable to control the basic directions and

Figure V

Discriminant Function Centroids for Resource Rating Scale (RRS) Scores, Using Legislative Work Role as Criterion for Grouping Respondents

(See Table 10A)



fundamental commitments of the insiders in any group or organization. Similarly, the insiders of any group typically feel that interactions among their group members are motivated by, and lead to realization of, broad public interests. It is comforting, however, to be able to measure and document this fact so convincingly. It is also important to discover that the members of legislative fiscal committees are the archtypical legislative insiders (i.e., they are the strongest supporters of the weak trustee model). The legislative leadership group, by contrast, occupies the mediating position on this first discriminant function -- reflecting the fact that they play the "linking" or "gatekeeping" functions, representing the legislature to outsiders while simultaneously protecting the members of the legislature from outside interference in their decision-making autonomy.

While the first discriminant function separates legislators from non-legislators, the second describes differences between the legislative leadership group and the shared views of fiscal committee members and executive agency staff personnel. (Note that the other four groups are all located close to the horizontal axis of Figure V, indicating near-zero centroids on the second function). As described above, the positive centroids for executive agency staff and fiscal committee members reflect an orientation toward the legislature as a responsive institution making decisions in reaction to external pressures. Legislative leaders, by contrast, view the legislature as an originator of public policy -- utilizing substantial internal resources and mechanisms to define and decide policy issues arising out of a general concern for the public interest. In addition to sharing the general view of all respondents that legislative decisions are made on the basis of value considerations, the legislative leaders are uniquely characterized by a respect for the importance of legal precedents, consistent laws, and orderly and manageable change as criteria for decision making. This probably reflects a view on the part of legislative leaders that the legislature becomes a powerful and effective political institution by producing laws which are (or at least appear to be) "good," both in the sense of responding to public interest, and in the sense of fitting into a single unified constitutional and statutory framework.

The overall pattern of the group centroids shown in Figure V helps to illuminate why the fiscal committees are universally recognized as the "most powerful" committees of the legislature and suggests something of the nature of the relationship between members these committees and other key actors in the decision making process. As indicated by the dotted lines on Figure V connecting the Fiscal Committee centroid with that of the Executive Branch group and the legislative Leadership there are two major "axes-of-action" which form the central core of the legislative decision-making process. The executive agencies on the one hand, and the legislative leaders on the other, focus a great deal of attention on the work of the fiscal committees and the budgetary decisions which they make. The concerns of these two groups are almost perfectly orthogonal, however.

The leaders want a strong legislature; they want the legislature to set priorities and allocate resources in terms of its own judgments about the nature of the public interest. In this sense, the leaders are typically not interested in (or even very knowledgeable about) the specific content of legislative proposals as they work their way through the system. They are very much interested, however, in the process of legislative decision making and in the overall support for the legislature (as measured by interest group endorsement, constituent reactions, mass media coverage, and campaign contributions) which results from decisions which are taken (or not taken).

The executive agencies, by contrast, are most interested in the specific content of legislative decisions and in their access to shaping or re-shaping proposals passing through the legislature. Executive branch policy makers see the legislature as too strong, too impervious to wisdom and guidance from the administrative agencies of government, and too willing to tinker with good proposals just to prove that the legislature can be independent rather than because they can improve on the final solution.

Within the overall framework defined by tensions between the fiscal committees and the leaders or the executive agency personnel are located in the other work role groups. Successively closer to the fiscal committees we find: 1) the interest group lobbyists who want more influence but often see the fiscal committees as potent and remote; 2) the legislative staff members, who frequently feel like "outsiders" in the sense that they see the legislators as too willing to ignore good advice and too susceptable to the erratic vicissitudes of popular opinion; 3) the education committee members who are "insiders" but who remain closer to the influence and insights provided by those outsiders who have more experience with the concrete situations and specific needs which are to be dealt with in proposed legislation. Reflecting their dual roles, those legislators with appointments on both education and fiscal committees are located between the two groups without joint committee assignments.

The relationships among the work role groups revealed in Figure V is probably best explained in terms of the involvement of these groups in the legislative workflow stages described in Chapter II (i.e., Articulation, Aggregation, Allocation, and Oversight). As suggested by the boxes drawn on Figure V, the Executive agencies, the Lobbyists, and the Legislative Staffers are most deeply involved in the articulation process. The Education Committee members (with help from those who share appointment on the fiscal committees) perform the major Aggregation functions of screening proposals for acceptability, garnering needed support and/or amending proposals until they will "fly" or "sell" in the total legislature. The Fiscal Committees are the prime Allocation agents, setting priorities among proposals flowing from Education as well as other policy committees.

It is impossible to identify responsibility for the Oversight stage on Figure V. There are two reasons for this. First, there are no unique oversight structures in the legislatures, and therefore no way to group our respondents in a way that would permit a unique Oversight orientation to be separated out from the Articulation, Aggregation, or Allocation orientations characteristic of the groups under study. Secondly, so far as we could discern in our interviews, oversight represents a personal rather than a role-group orientation in the sense that we could find no general tendency for one role-group to be more interested in oversight than others. While we found that individual's interested in oversight processes do share a common tendency to be critical of both existing legislative policy and current school operations, such interests are about equally characteristic of legislators, staffers, or executive agency policy makers. Indeed, lobbyists were sometimes the strongest advocates of improved legislative oversight. In summary,

> Major Orientation Finding #8: The most effective discrimination among legislative orientations is based upon the work-roles of our respondents. Nearly 90% of the variations in legislative work-role group membership are related to differences in decision making orientations. Non-legislators are distinguished from members of the legislature by their belief that legislative decisions are more heavily influenced by Inside reference groups, Bargaining styles, Legal but not Value-based authority modalities and involve Outside Analysis but not Inside Analysis mechanisms. Legislative leaders are distinguished from all other groups (but especially executive agency staff and fiscal committee members) by their belief that legislative decisions depend upon Outside reference groups, the Legal authority mode, and input from Inside Bargaining but not Outside Bargaining mechanisms.

Authority Modality Orientations. Having discovered that legislative work-role groups have sharply differing overall orientations regarding the factors which control legislative decision making, we decided to examine each of the four major orientation factors separately. Table 10B presents the discriminant function coefficients and work-role group centroids resulting from a multiple discriminant analysis of the four Authority Modality RRS sub-scales. As the table indicates, two authority modality functions are highly significant ($p \doteq .000$ in each case) and together enable us to predict 43% of the variations in work-role group membership. Moreover, while there are some differences in the extent to which each of the four authority modality sub-scales contributes to the overall power of discrimination, all four scales contribute significantly to both of the functions.

Substantively, high positive scores on the first discriminant function represent an endorsement of Values and Expertise and a rejection of Friendship and Legality as bases for decision. Negative scores, of course, reflect a belief that Friendship and Legality are more important relative to Values and Expertise. As we have previously noted, the common thread which links Values and Expertise is their importance in defining social goals and in delineating the most appropriate strategies for approaching those goals. By contrast, Legal and Friendship modes of authority are predominately directed at defining and structuring social roles and at specifying the formal and the informal relationships which are appropriate to those roles. Hence, individuals or groups with high scores on the first authority modality discriminant function characteristically see legislative decisions as proposed and made on the basis of the goals toward which they are directed, while those with negative scores on this function see legislative decision making as pre-occupied with the definition and maintenance of social roles (either among the decision makers themselves or within the larger society).

Table 10B

DISCRIMINANT ANALYSIS OF AUTHORITY MODALITY RRS SUB-SCALES, USING LEGISLATIVE WORK ROLE AS CRITERION FOR GROUPING (COEFFICIENTS FROM DIRECT ANALYSIS; FUNCTION EVALUATION FROM STEPWISE ANALYSIS)

	Discriminant Function Coefficients	
Sub-Scale	Fcn. 1	Fcn. 2
	$(\chi^2_{18}=87.8; p=.000)$	$(\chi^2_{10}=32.1; p=.000)$
Values	.452**	-.354*
Friendship	-.441*	.379*
Legality	-.360*	-.641**
Expertise	.359*	.461*
Canonical Correlate	.528	.391
Canonical R^2	.28	.15 $\Sigma R^2 = .43$

**Largest Coefficients
*Coefficients at least 1/2 largest

Group Centroids in Reduced Space (See Figure VI)

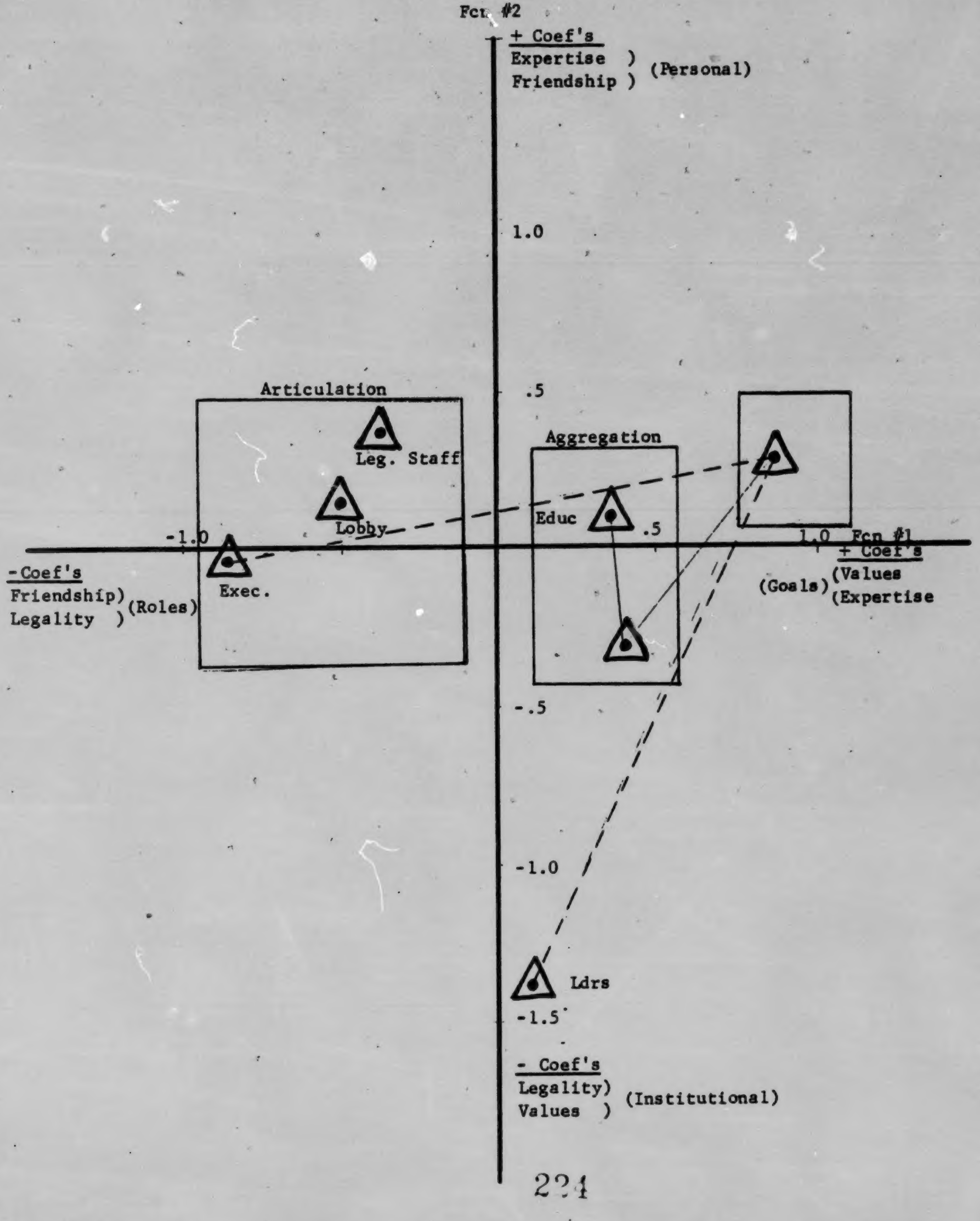
Group	Fcn. 1	Fcn. 2
Legislative Leaders	.039	-1.412
Education Comm.	.374	.085
Fiscal Comm.	.850	.291
Education and Fiscal Comm.	.402	-.275
Legislative Staff	-.328	.268
Executive Staff	-.745	-.020
Lobbyists	-.513	.046

The second discriminant function shown on Table 10B is characterized by high positive coefficients for Expert and Friendship authority modes and sharp rejection of the Legal and Value modes. Friendship and Expertise share in common the fact that they are personal characteristics and work to control decision outcomes only if an individual is able to achieve recognition as a person of knowledge or influence on the issue under consideration. By contrast, Values and Legality represent institutional modes of authority in the sense that persuasive appeal depends on the institutional identity rather than the personal character of the individual seeking to invoke them as grounds for decision. Thus, for example, one does not have to be an expert in school finance to argue persuasively that unequal funding is either unconstitutional or immoral or both. And a person does not have to be loved or respected to be persuasive if he can show that a proposed decision is illegal or repugnant to public values. Therefore, those with high positive scores on the second authority modality discriminant functions are characterized by a belief that legislative decisions are heavily influenced by the personal characteristics of the key actors involved in making them. Those with strongly negative scores view legislative decisions as controlled more extensively by the institutional frameworks of public morality and constitutional law.

Figure VI depicts graphically the centroid scores for our seven legislative work role groups based on their authority modality RRS sub-scale scores. Notice that the pattern on this figure is quite similar to that

Figure VI

Discriminant Function Centroids for Seven Legislative Work Role for the Four Authority Modality RRS Sub-scales
(See Table 10B)



found in Figure V; the non-legislator groups (Executive Branch, Lobbyists, Legislative Staff) are to the left of the vertical axis, the legislator groups are largely to the right. (Once again, the legislative Leadership group has a near-zero centroid on the first function but is strongly negative on the second one.) Thus, we can see that the non-legislators--especially the Executive Branch personnel--see legislative decisions as heavily influenced by role based authority. They contrast with the Fiscal Committee members who insist that decisions are more goal dominated. The Leadership group is unconcerned with this divergence in orientation, but is strongly committed to the belief that legislative decisions are controlled by institutionalized legal and value norms. They contrast most sharply with the Legislative Staff and Fiscal Committee groups who see stronger personal influences arising through expertise and friendship norms which provide control over decision to those actors who are (or at least appear to be) interpersonally effective and/or knowledgeable about the issues to be decided.

There is, no doubt, some self-serving in the tendency of legislative staff members to see decisions as less firmly rooted in expertise than the legislators for whom they work. Staff members, who typically possess larger amounts of expertise than most legislators, probably feel that they are less influential than they should be, while the legislators--especially the fiscal committees, who typically have the most sophisticated and expert staffs available to them -- probably feel that their staff is forever telling them why a proposal which they like for political or value based reasons is unnecessary or unworkable. In this way the legislators may come to feel more strongly the constraints of the expertise which they use, while the staffers tend to see their own expertise being neglected in the effort to reach political accommodation and compromise.

Similarly, the Lobbyists and Executive Branch personnel, no doubt, frequently find that access to the Aggregation and Allocation stages is constrained by a clubbish atmosphere of established influence patterns among the legislators and that the rejection of their policy proposals is too often based on an exaggerated respect for established law and practice. The legislators themselves, however, respond to the constant demands to "do something" made by those outside the legislature by believing that they must define social goals and develop the expertise needed to know how to pursue them. They may feel that the main problem is not so much a matter of too little access for legitimate interests as too much access for inadequate and ill-considered proposals which are out of harmony with the public interest or simply unworkable as a matter of practical public policy. Legislators feel deluged with proposals in almost unmanageable numbers--they felt a need for higher quality policies representing broader public interests. In sum,

> Major Orientation Finding #9: The four authority orientation sub-scales of the RRS discriminate effectively among the seven legislative work-role groups. Legislative committee members--especially fiscal committee members--have a strong appreciation of Values and Expertise types of authority (apparently reflecting a concern with the determination of legislative goals). Non-legislator respondents--especially members of the executive branch staffs tend to see decisions in terms of Legal and Friendship authority modes (i.e., believe that they

are influenced by role relationships and behavioral norms). Legislative leaders, undistinguished with regard to goal vs. role based authority strongly embrace Values and Legality as authority for decision (apparently reflecting an orientation toward institutional rather than personal bases for decision). Legislative staffers and fiscal committee members contrast most sharply with the leaders in their embrace of the more personalized authority modes of Friendship ties and Expertise.

Reference Group Orientations. Since there are only two reference group orientation sub-scales in the RRS and they are ipsatively scored (i.e., a positive score for one reference group orientation is accompanied by an equally negative score for the alternative viewpoint) a simple analysis of variance (ANOVA) technique is all that is required to determine whether our seven work role groups differ significantly in the relative strength of their orientations toward Inside or Outside legislative decision-making reference groups. The top part of Table 10C presents the means and standard deviations for the Inside and Outside reference group scores for each of the seven legislative work role groups. At the bottom of the table is an ANOVA source table for the Inside reference group subscale, indicating that our seven groups do indeed have significantly different views regarding the extent to which inside rather than outside reference groups play the more important role in shaping the legislative decisions.

Graphically, these differences in inside versus outside orientation can be seen by placing the seven work-role group means along a straight line, separated by distances proportional to their mean scores. Figure VII presents such a line-graph.

Table 10C

Work Role Group Means and Analysis of Variance Results for the Reference Group Sub-scales of the RRS

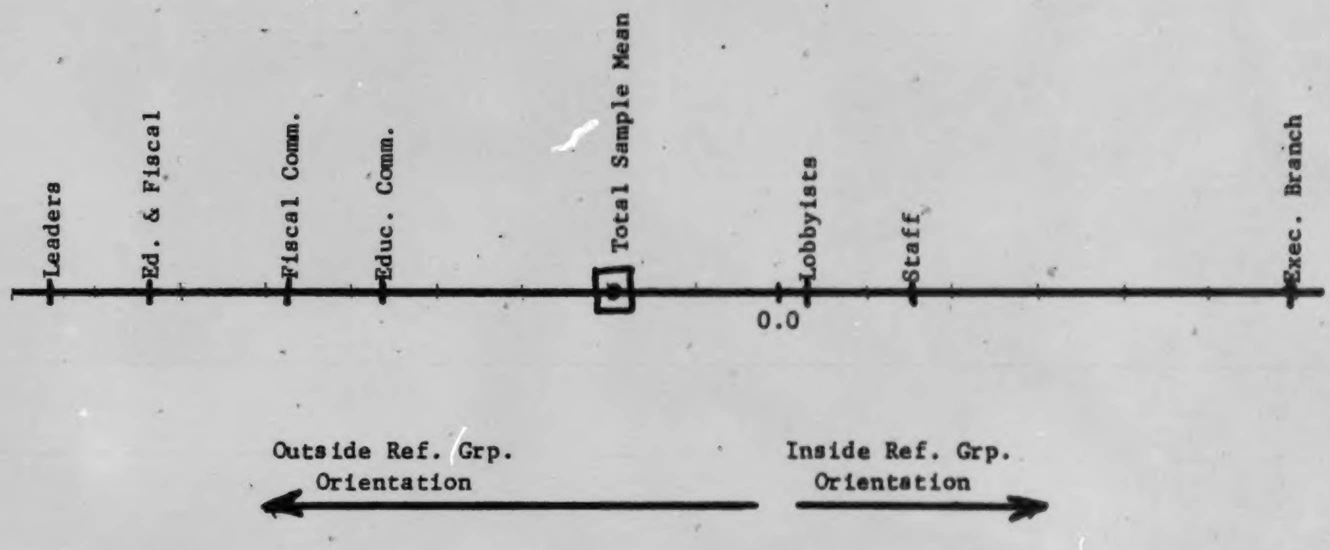
Work Role Groups	N	Inside Reference Groups Mean	(S.D.)	Outside Reference Groups Mean	(S.D.)
Leaders	6	-2.167	(1.17)	2.167	(1.17)
Education Committee	33	-1.152	(2.86)	1.152	(2.86)
Fiscal Committee	25	-1.440	(2.20)	1.440	(2.20)
Education & Fiscal	25	-1.840	(1.75)	1.840	(1.75)
Staff	38	.395	(2.38)	- .395	(2.58)
Executives	19	1.474	(1.93)	-1.474	(1.93)
Lobbyists	31	.097	(2.70)	- .097	(2.70)
Total	177	- .491	(2.57)	.491	(2.57)

ANOVA Source Table

Source	Sums of Squares	df	M.S.	F.	p
Between Groups	212.68	6	35.45	6.32	.000
Within Groups	953.58	170	5.61		
Total	1,166.26				

Figure VII

LINE GRAPH DEPICTING MEAN SCORES ON INSIDE/ OUTSIDE REFERENCE GROUP ORIENTATIONS



The most striking feature of this line-graph is that mean scores for all of the legislator groups are on the Outside reference group end of the line, while all of the non-legislators have mean scores on the Inside reference group side. Clearly direct participation in the decision-making process leads members of the legislature to believe that they are responding more to public and constituent interests than to personal and political factors within the legislature itself. By the same token, being outside the process leads non-members to the conviction that legislative rather than public interest factors are dominant. It is significant that the strongest contract between these alternative views is that between the legislative leaders and the executive branch staff. Lobbyists, legislative staffers, and legislators without formal leadership roles are less sure of the relative importance of internal and external factors than are these two groups. Interview tapes suggest that the reasons for the exaggerated views held by the leadership and executive groups are both uncomplicated and important. Remarks by legislative leaders indicate that they are perpetually concerned to establish and maintain the legitimacy and autonomy of the legislature and that they are constantly being charged with insensitivity, irresponsibility or corruption by those who are disappointed with policy decisions that have been made. Hence the leadership must believe--and proclaim--that legislative policy is in best interests of the entire public. Executive agency staffers, by contrast, have no stake in legislative legitimacy. They are quite happy to accuse the legislature of irresponsibility if needed in order to embarrass them into action. Executive agency staffers are even freer to use this tactic than are lobbyists or legislative staffers, because they can never be entirely cut off from access to legislative decisions. Lobbyists can be ignored, and the legislative staff can be replaced, but the executive agencies will continue to operate and will have great latitude to either reinforce or interfere with legislative intentions. In sum,

> Major Orientation Finding #10: Legislative work role groups show highly significant differences in their orientations toward legislative reference groups. The Leadership and Executive Branch groups are most strikingly divergent, with the Leaders believing that decisions are referenced to Outside groups and Executive Agency personnel seeing them as Inside referenced.

Decision Style Orientations. Like the reference group sub-scales, there are but two, ipsatively scored, decision style sub-scales in the RPS. Hence, the same analysis of variance approach utilized to test for differences in reference group orientation can be applied to determine the nature and extent of differences between our seven work role groups in regard to their orientations toward either Analytic or Bargaining approaches to legislative decision making. Table 10D and Figure VIII present the mean scores, ANOVA results, and line-graph depicting the relationship between our seven work-role groups in regard to their decision style orientations.

The ANOVA source table once again reveals that legislative work roles have a powerful effect on individual orientations toward the usefulness of analysis and/or bargaining strategies for decision making in the legislature. As with the reference group orientation scales, Figure VIII shows

Table 10D

Work Role Group Means and Analysis of Variance Results for the Decision Style Sub-scales of the RRS

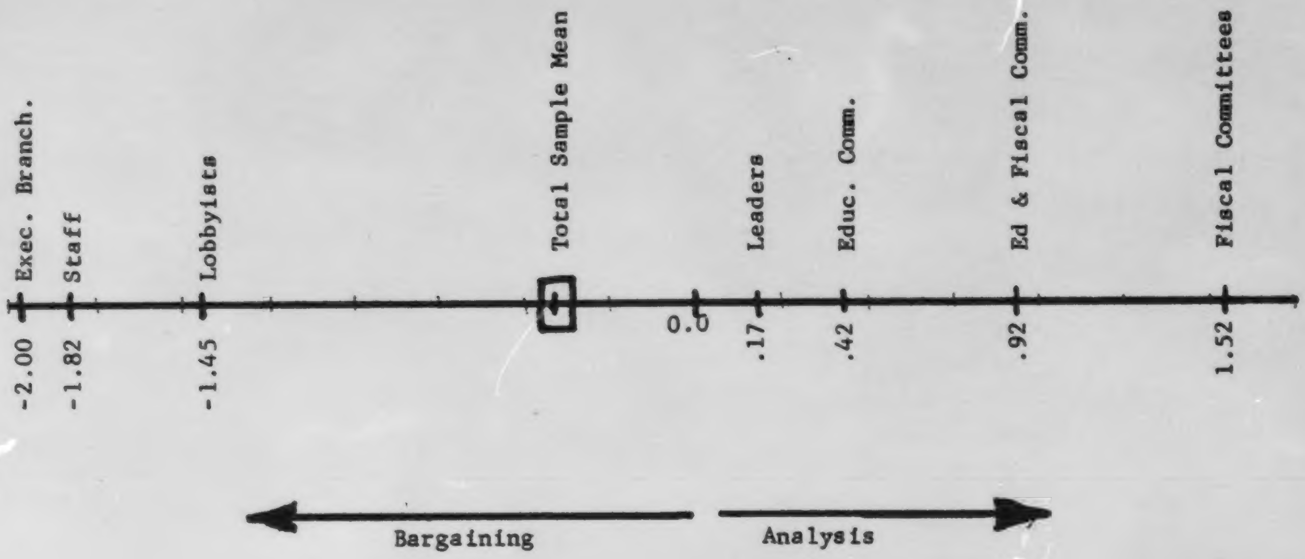
Work Role Groups	N	Analysis Mean	(S.D.)	Bargaining Mean	(S.D.)
Leaders	6	.167	(4.67)	- .167	(4.67)
Education Committee	33	.424	(2.48)	- .424	(2.48)
Fiscal Committee	25	1.520	(2.82)	-1.520	(2.82)
Education & Fiscal	25	.920	(2.16)	- .920	(2.16)
Staff	38	-1.816	(2.37)	1.816	(2.37)
Executive Branch	19	-2.000	(2.47)	2.000	(2.47)
Lobbyists	31	-1.452	(2.46)	1.452	(2.46)
Total	177	- .429	(2.85)	.429	(2.85)

Analysis of Variance Source Table

Source	SS	df	M.S.	F.	p
Between Groups	317.47	6	52.91	8.12	.000
Within Groups	1,107.88	170	6.52		
Total	1,425.35				

Figure VIII

Line Graph Depicting Mean Scores
on Analysis/Bargaining Style Orientations



that all legislators share a conviction that analytic styles characterized by reasonableness and technical considerations are more important than Bargaining and compromise for creating consensus among interested parties, while all non-legislator groups hold the opposite view. Note, however, that in this case the extreme views place the executive branch respondents in opposition to members of the legislative fiscal committees. The legislative leaders, who are strongest in their embrace of Outside oriented reference groups have no clear commitment on the analysis/bargaining question. The strong analytic orientation of the fiscal committee members is easily understood if we remember that they must defend the content of specific decisions rather than the institutional legitimacy of the legislature and must show, therefore, that their work is technically competent, not just politically convenient. Once again, the executive agencies are the most critical of the legislature. They are quick to challenge both the validity of specific decisions and the legitimacy of the legislature itself in order to gain a more favorable final outcome. Note, however, that the legislative staff and lobbyists are closer to the executive agency respondents on the matter of decision style. These groups are about equally convinced that legislators operate with pragmatic compromise and conflict management styles rather than developing the technically "best" policy solutions. In sum,

> Major Orientation Finding #11: Legislative work role groups are sharply divergent in their decision style orientations. Members of legislative fiscal committees are most divergent from executive agency personnel on this factor. Fiscal committee

members view decisions as controlled by Analytic strategies, while Executive Agency staffers see Bargaining as dominant.

Mechanism for Decision Orientations. Having found that our seven legislative work-role groups have significantly different orientations with respect to the authority, reference group, and decision style sub-scales, we also examined their views regarding the contributions to legislative decisions made by the various mechanisms operating within and upon the legislature. Since there are four mechanism sub-scales in the RRS it was necessary to return to the discriminant analysis procedure used for testing differences in sensitivity to the various authority modalities described above.

Discriminant coefficients and work-role group centroids derived from multiple discriminant analysis of scores on the mechanism sub-scales are presented in Table 10E. Note that two significant discriminant functions result from this analysis the first is highly significant ($p \doteq .000$) and the second modestly significant ($p = .044$). The first function enables us to predict about 28% of the work-role group membership within our sample and the second adds an additional 16% to the explained variance, giving us a total ability to predict group membership based on decision mechanism scores of 44%.

Substantive interpretation of the first discriminant function is based on the recognition that the Inside Analysis and Inside Bargaining sub-scale scores contribute most to its overall power. Therefore, a high score on

Table 10E

Direct Discriminant Analysis of Mechanisms for Decision RRS Sub-Scales, Using Legislative Work Role as Criterion for Grouping Respondents

Sub-Scale	Fcn #1 (R=.525) (χ^2_{24}=80.50; p=.000)	Fcn #2 (R=.402) (χ^2_{15}=25.45; p=.044)
Inside Bargaining	-.547*	.473*
Inside Analysis	.606**	.019
Outside Bargaining	-.097	-.816**
Outside Analysis	-.160	.001
	R^2=.276	.162

**Largest Coefficient
*Coefficient at least 1/2 largest

Group Centroids in Reduced Space

Group	Fcn #1	Fcn #2
Leaders	- .064	1.356
Education Committee	.308	.074
Fiscal Committee	.803	.015
Education and Fiscal Committee	.582	- .242
Legislative Staff	-.528	.119
Executive Staff	-.379	- .636
Lobbyists	-.505	- .080

this discriminant function reflects a belief that legislative decisions are strongly influenced by analytic rather than bargaining mechanisms found within the legislature itself. That is, high positive scores on this function reflect the belief that:

16. Relying on Adequate Staff Work

17. Deliberations within Legislative Committees

and 18. Reaching Legislative Consensus through Study and Discussion

rather than:

13. Negotiations Among Legislators

14. Legislative Leadership Priorities

and 15. Reaching Political Accommodation through Compromise

control the legislatures' decisions.

The second discriminant function depends most heavily upon the rejection of Outside Bargaining influences in favor of Inside Bargaining mechanisms. Thus high positive scores on the second function result from orientations which embrace:

13. Negotiations Among Legislators

14. Legislative Leadership Priorities

and 15. Reaching Political Accommodation through Compromise

while strongly rejecting

19. Pressure from the Governor's Office

20. Support from Influential Groups

and 21. Balancing Budget Demands of Various Groups

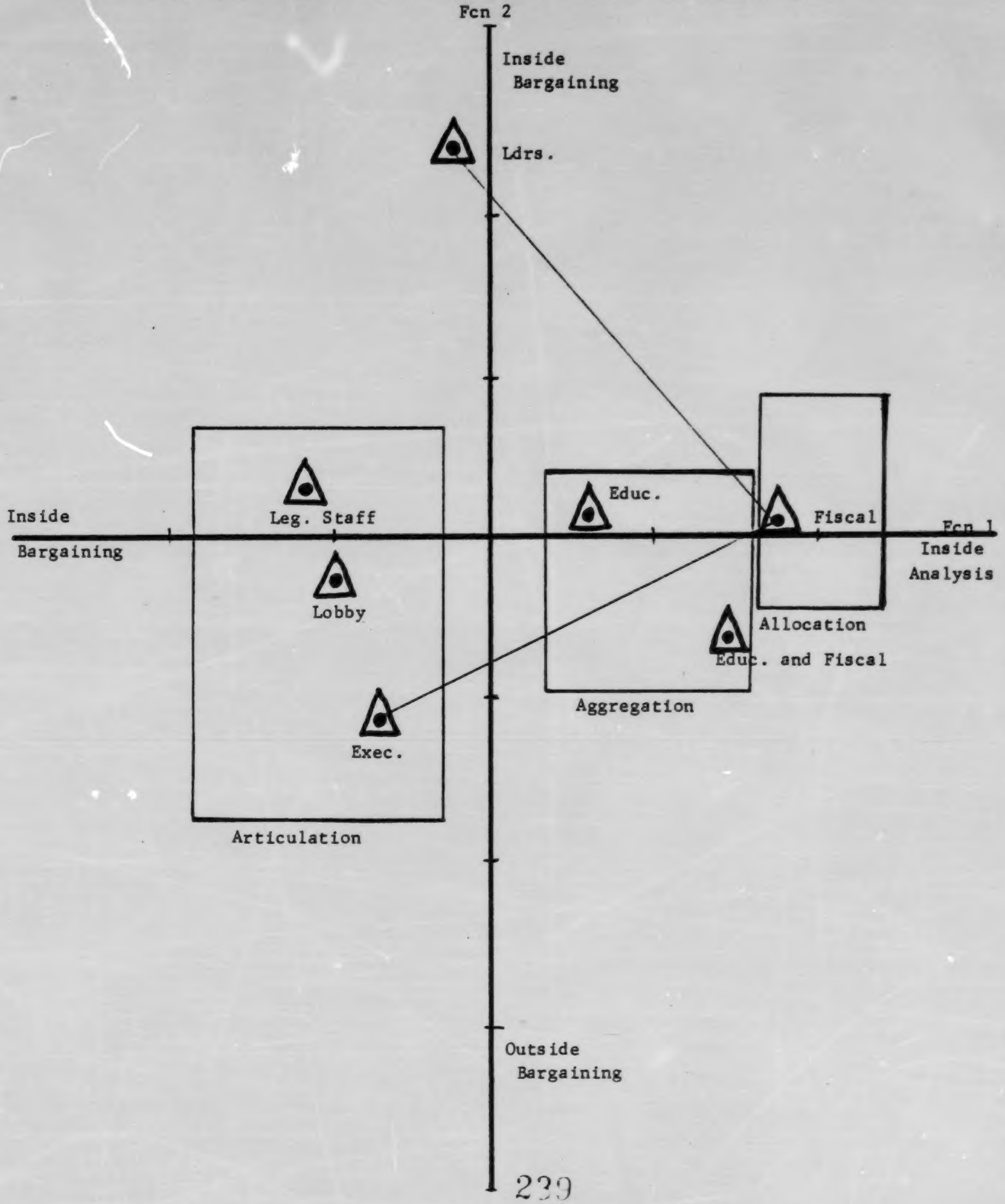
as critical mechanisms for the control of legislative decisions. Thus the first function represents the tension between policy making and politiking (or perhaps between statesmanship and politics) as descriptions of what legislative decision-making is about, while the second function displays the tension between legislative autonomy and legislative responsiveness as a description of the relationship between the legislature and other political structures in our society.

The centroid scores shown at the bottom of Table 10E are displayed graphically in Figure IX. Notice that, once again, the seven work role groups are arrayed in terms of their participation in three primary work flow stages (Articulation, Aggregation and Allocation)--except for the legislative leadership group which holds a neutral position on the first discriminant function, but not on the second discriminant function. Also notice that the Leadership and Executive Branch groups are farthest from the Fiscal Committee members and that they are separated from the fiscal committee group in radically different ways.

The location of the Executive Branch group centroid reveals that these respondents believe that legislative decisions are affected by both Inside Bargaining and Outside Bargaining processes, but are less influenced by analytic mechanisms. The Legislative Leadership group concurs with the Executive group in their judgment that Inside Bargaining is vitally important, but they reject the outside Bargaining orientation most strenuously. The more remote from the fiscal committee respondents are in relation to the legislative decision making process, the less confident they are likely to be that analytic mechanisms are actually utilized in the decision process. In sum,

Figure IX

Discriminant Function Centroids for Seven Legislative Work Role Groups (4 Mechanism for Decision RRS Sub-scales--see Table 10E)



Major Orientation Finding #12: Taken alone, the mechanism for decision sub-scales of the RRS discriminate among the legislative work role sub-groups quite effectively. Legislative committee members, especially fiscal committee members, embrace the use of Inside Analysis mechanisms, while non-legislators see decisions as depending more on Inside Bargaining mechanisms. Along a second dimension, the legislative leaders strongly reject the Outside Bargaining mechanisms in favor of Inside Bargaining mechanisms. Executive branch staffers contrast most strongly with the leaders in believing that decisions depend upon Outside Bargaining mechanisms. Hence, by embracing Outside Bargaining, the executive staffers contrast sharply with both fiscal committee members who prefer Inside Analysis mechanisms and legislative leaders who prefer Inside Bargaining ones.

The Combined Effects of Various Factors Affecting Legislative Orientations

In order to examine possible interaction effects related to the two powerful factors affecting legislative orientations (legislative work roles and differences between states), and in an effort to examine more closely orientations toward each of the six issues on which our respondents were interviewed, we submitted the RRS data to a series of 3-way analysis of variance tests. In each test, scores on a single RRS sub-scale were used as the dependent variable for analysis and the three orthogonal factors: work-role, state, and interview issue, were used as independent variables to create cells for the cross-classification of respondents.

Table 11 summarizes the F-statistics from ten three-way ANOVA outputs. We found that there were no significant three-way interactions between respondents' legislative experiences and specific issue concerns.

Among the two-way interaction effects (testing the confounding of each pair of factors), we found that only one F-statistic which reached the .05 level of significance (the $F_{10,132} = 2.25$ for the Issue x Work role interaction when testing the Analysis/Bargaining Decision

Table 11

Three-Way Analysis of Variance Findings for RRS Sub-scales,[1]
Using Education Policy Issue, Legislative Work Role and State as Factors

		F Statistics for Each RRS Sub-Scale									
		Authority				Reference Group	Style	Mechanisms			
Main Effects	df	Val.	Frnd	Lgl	Expt	Inside/ Outside	Anal/ Bargain	IA	IB	OA	OB
Issue	5	1.03	.42	1.32	.49	.85	1.77	2.01	1.35	3.14	1.82
Work Role	2	16.70^{***}	12.49^{***}	3.75^{*}	3.22^{*}	9.40^{***}	19.52^{***}	25.73^{***}	9.27^{***}	2.52	7.04^{***}
State	2	.90	.39	4.23^{*}	1.07	7.23^{***}	.67	.29	.01	4.84^{**}	2.24
2-Way Interactions											
Issue x Work Role	10	.78	1.09	1.01	.50	1.22	2.25^{*}	.95	.97	1.41	1.88
Issue x State	10	.67	.58	.99	.80	.64	1.11	1.30	1.56	1.39	.70
Work Role x State	4	.70	1.71	1.33	.26	1.95	1.76	.19	.66	.43	.75
3-Way Interactions											
Issue x Work Role x State	11	.56	1.01	.94	1.11	.61	1.46	.94	.66	.75	.62
Error	132										
Total	176										

* $p \leq .05$
** $p \leq .01$
*** $p \leq .001$

---

[1] Analyses performed on each sub-scale successively, results are accumulated on this table to facilitate comparisons

Style sub-scale). This finding should probably be discounted since we calculated a total of 70 F-statistics and should expect, therefore, to get three or four (one in twenty) which are significant at the .05 level by chance alone. Moreover, the main effect for work-roles on this RRS Sub-Scale produced $F_{2,132}$ of 19.52 which is large enough to indicate a very strong work-role effect, despite the fact that decision style responses were, to some extent, colored simultaneously by the issue being discussed and the work-role of our respondents.

The most interesting and important findings in Table 11 concern the main effects for each of the three factors. As expected, even when controlled for the respondent's state and the issue being discussed, there were consistently powerful main effects for legislative work-roles. Only the Outside Analysis mechanism sub-scale failed to reach at least the .05 level of significance, and seven of the ten sub-scales produced work-role effects well above the .001 level of significance. The substantive meaning of these effects and of those relating to differences between the states have been fully discussed in relation to the multiple discriminant analyses presented above (see Tables 8 and 10A-E).

With regard to differences between the issues covered in our interviews, we discovered that only the Outside Analysis mechanism scale was able to significantly distinguish among respondents' decision orientations when the effects of work role and state of residence are controlled. We found that when discussing categorical programs legislative policy makers identify the outside analytic decision mechanisms:

22. Insights provided by Interest Group Lobbyists

23. Interpretations provided by Executive Agencies

and 24. Understanding Constituency Interests

as more effective in controlling decisions than when they are discussing School Finance issues. When discussing any of the other four issues respondents' Outside Analysis scores ranged between the extremes represented by these two issues and were generally much smaller in magnitude. Apparently, legislative policy makers are much less sure of the validity of their own judgments regarding the creation of categorical programs than when resolving issues of school finance. It is difficult to tell whether this stronger reliance on outside sources of influence and judgment arises perhaps because there is generally a lower level of concern within the legislature regarding the control of largely minority population oriented categorical programs or because there is a lack of adequate minority representation within the legislature. The racial and ethnic minority emphasis of most categorical programs means that decisions in this policy area not only affect a narrower range of interest groups but also require insights into the special needs of groups not well represented within the legislature. Either or both of these characteristics might be responsible for the general perception among our respondents that outside analytic mechanisms contribute more powerfully to these decisions than they do to the more broadly based and more technical questions involved in school finance. In sum,

> Major Orientation Finding #13: Using a three-way analysis of variance technique to partial out the effects of work-roles and state of residence effects demonstrates that there is only one important difference in the orientations of our respondents toward the various education issues discussed in their interviews, namely

that categorical programs are seen to depend most heavily on *Outside Analysis* mechanisms, while *school finance* issues are least influenced by these mechanisms.

A Footnote on Ethnic Orientations

Because our field interviews left the unmistakable impression that ethnic minority respondents had unique concerns and special orientations toward the legislative decision-making process, we decided to explore in somewhat more detail the relationship between the small group of minority respondents and the large group of ethnic majority respondents for whom we had complete RRS data. As shown in Table 12, the use of *stepwise* multiple discriminant analysis on the RRS data produces a statistically significant discriminant function ($\chi^2 = 8.49$; df = 3; $p = .037$) for separating these two groups. Generally, we agree with Colley and Lohnes (1962) who find stepwise multivariate analytic procedures to be suspect. The issue here is important enough, however, to justify their cautious use for the interpretation of ethnic differences in legislative orientations. The canonical correlation coefficient of .22 indicates that approximately 5% of the variance in ethnic group membership can be predicted from the RRS data. While this is not large it is statistically significant and indicates that the function can be used to interpret some of the differences in orientation which are distinctive to each group.

Note that this discriminant function relies for its power on just three of the RRS sub-scales: the *Analytic* decision style scale (coef. = .792), *Outside Analysis* mechanism scale (coef. = .610), and the *Expert* authority scale (coef. = -.407). Note also that the *minority* centroid

Table 12

Stepwise Discriminant Analysis of RRS Sub-Scales Using Ethnicity as the Criterion Variable for Grouping Respondents

RRS Sub-Scales	Discriminant Function Coefficients Function #1 (χ^2_3=8.49; p=.037; R=.22)
Expert Authority	-.407*
Outside Analysis Mechanisms	.610*
Analysis Decision Style	.792**

**Largest Coefficient
*Coefficient at least 1/2 Largest

Group Centroids in Reduced Space

	Fcn #1
Majority	-.050
Minority	.941

score is positive while the majority centroid is negative indicating that minority respondents tended to embrace the Analytic style and the Outside Analysis mechanisms while rejecting the Expert authority mode when compared to the non-minority respondents. This finding dovetails nicely with the discovery that minority focused, categorical program issues discussed above are also seen as influenced most heavily by Outside Analysis mechanisms (see Table 11). In combination, these findings suggest that minority interests, whether they are being expressed directly by minority actors or arising indirectly through consideration of special categorical programs are forced to rely more heavily on arguments than bargains and must be supported strongly by groups and agencies outside the legislature itself if they are to receive favorable action. In sum,

> Major Orientation Finding #14: While direct discriminant analysis does not yield significant separations between ethnic minority and majority respondents, stepwise analysis isolates analytical style orientations, reliance on outside analysis mechanisms, and rejection of expert authority as characteristic of minority orientations toward legislative decisions.

C. ORIENTATION AND THE LEGISLATIVE WORKFLOW

The purpose of this section is to link the statistical survey data analyzed in the preceding section with tape recorded interview data gathered through 253 issue-based interviews with 160 different respondents. As described in Chapter IV, a loosely structured interview schedule (Appendix E) was used to focus our conversations with key legislative actors. Three specific issue areas were identified in a letter sent to each respondent prior to the interview (see Appendix B and C). Although time constraints made it necessary to limit most interviews to one or two of these issues, interviews were always focused on the issues specified in the letter.

Content analysis of the taped interviews provide important insights into several aspects of the relationships between key legislative actors and the decision-making processes in which they participate. First, the tapes reveal, in interesting and rich textured detail, basic variations in the way individual actors engage in their work roles. Close scrutiny of these basic variations in role-taking by key legislative actors illuminates both why they approach their roles differently and what differences in participation in the legislative decision-making workflow result from the role-taking choices that are made.

A second major contribution to our understanding of participation in legislative decision-making made by the taped interviews concerns the effects of variations in work-role engagement on each actor's overall decision-making orientation. Specifically, the tapes helped greatly in interpreting the close relationship which exists between individual interpretations of their roles and their responses to the four major parameters of a decision-making orientation embodied in the RRS instrument design.

A third major contribution of the tapes concerns the relationships between work role choices, decision-making orientations, and the utilization of social science research and evaluation within the legislative process.

The questions of work role choice and decision orientation will be explored in the remainder of this section; the issue of social science utilization will be examined in Section D.

Variations in Legislative Work Roles

While the seven work role groups utilized for the statistical analyses of the RRS data display obvious and systematic differences in their day-to-day activities and legislative decision-making responsibilities, the clustering of respondents into these seven groups obscures important differences in the way individuals within each group approach their work. Listening to the tape recorded interviews quickly dispels any illusion that all legislators, all staffers, or all lobbyists hold identical views of their responsibilities or their opportunities for action. Close scrutiny of the tapes, however, also reveals that the variations in role-taking behavior within each group are to some extent systematic and related to both specific characteristics of the larger work role structure and the unique nature of the legislative workflow through which all issues pass as they move from articulation and aggregation to allocation and oversight.

Variations Among Legislators. There are at least three different reasons why legislators choose different approaches to filling their work roles. The first, put succinctly by one Oregon legislator, is because, "if you're going to get something done, you have to limit your scope. You cannot be a 'Michaelangelo' in this system. You cannot be everything--you have to narrow your scope and concentrate..." This legislator, along with many others, reminded us that there are always too many decisions to be made and too many issues to be understood for any one individual--no matter how energetic or well supported by a staff--to be able to form independent judgments on all of them.

An Arizona legislator told us how this need to concentrate one's attention affects participation. She said,

> Where your major interest lies depends on where you serve in the legislature. If you serve on Education, you are concerned about education and its programs, and the response of the public to that. If you serve on Finance or Appropriations you become more concerned about other things--such things as education's percentage of the total budget, the general overall tax rates that are going to be required and the effect its going to have on the general economy of the state. Is it going to drive industry out? Is it going to place an undue burden on any given economic interest? So a lot depends on where your own interest is as to which factors you look on as important.

Moreover, as a California legislator told us,

> unless you are a member of a particular policy committee you really don't know all of the background, you don't get the background information to read, you don't get the consultants' analyses and you don't see the germination of the issue or the development of the issue before it reaches the floor (or the finance committee--if you are on the finance committee).

A second reason behind each legislator's choice of an approach to his/her work role is slightly more subtle. Within the legislative process, we were told,

> Creativity is not a value or an attribute that one tends to ascribe to successful politicians. To the contrary, creative people may get selected out very quickly. Consequently, people do not tend to get very deeply involved in the nuts and bolts, like budgets and taxes--and that's unfortunate. But that's the toughest part of our job and the one where there's absolutely no political payoff. I mean, knowing about something like taxation isn't going to get you political rewards, cheers from the fans, or any other payoff.
>
> (Oregon, Legislator)

While this statement is clearly more exaggerated than most, many of our respondents suggested that there are serious tensions between what it takes to be an effective politician and what is needed for adequate policy making. Thus, for example, although taxation is basic to policy making,

> as far as taxes are concerned, you're always against them. That's rational politically. It does not, however, advance public policy. It doesn't give you any improvements. It helps the individual political actor. So you have got people who are not concerned with advancing public policy--they are concerned with their own political agendas or to merely represent the interests of a suburban district that they want to get the most for.
>
> (Oregon, Legislator)

These forces which pull many legislators away from policy making and into political career building make it always heartening and just a little surprising that things start to move,

> once we showed some leadership along the lines of being willing--instead of being purists--to put together a bill that would get the votes.
>
> (California, Legislator)

The third reason for legislators to take different approaches to their work roles rests on their own personal interests, commitments, skills, attitudes or values. One Oregon legislator told us:

> I'm a teacher. I and the rest of the educational community are interested in improving education. The task force studying basic competencies had three or four legislators on it. Most of the educators in the legislature got themselves put on that task force. And we concluded that if this program was going to be effective or be useful, it should be doing something that would improve education.

Making a similar point, a California legislator said that a recent piece of major legislation was,

> a creation of my own, and was not the creation of someone else. It was based on my own experience as a high school teacher, knowing that kids were being graduated from high school who were functionally illiterate.... I've been quite surprised, but also pleased by the attention the bill has gotten and the extent to which it has been taken seriously in school districts throughout the state.

Although these personal interests frequently reflect prior professional or work experience, they can also result from a number of other factors. An Arizona legislator, for example, highlighted the importance of ethnic political identities when she said,

> Our legislators of Mexican-American descent, and ones who represent areas of high Mexican-American population, obviously are very interested in seeing the bilingual program increased. That's a pretty well understood and obvious kind of situation.

An Asian-American legislator in California made a similar point when he said:

> I have co-authored most of the major bilingual legislation since I've been here, as well as authored some. I have spent a considerable amount of effort in involving the Asian communities in bilingual education. Prior to my entrance

> into the legislature there was not much recognition that Asians had the same kinds of language problems that the large group of Spanish speaking had, and we're now seeing more recognition of that fact here at the state level.

Often family and personal experiences or political ties to existing programs will be the critical factors in shaping the approach legislators take to their work. As the Arizona legislator quoted above puts it,

> Those who, in the past, have had some contact or reason to be concerned about special education--whether it be somebody in their own family or a group in their own district--have been the advocates for special education programs.

There are several important consequences for legislative decision-making which result from this inclination of legislators to adopt certain issues as "their own." First, legislators who work carefully and competently come to be known as "Mr. Vocational Education," "Mr. Special Education," or "Mr. School Finance" and can almost single-handedly control the legislative agenda in the area they have chosen for specialization.

Secondly, when a proposal is being developed, there is a powerful tendency for those trying to articulate the new policy to seek out interested legislators and engage them in a coalition of support. That is, new programs have a much better chance if they "start with the legislators who are going to be directly involved in trying to draft anything" (Arizona, Legislator).

A third consequence is that staff members and others assisting with the development of legislation begin to channel proposals to those with the established special interests. Thus, an Arizona Senate staff consultant said,

> Oftentimes, Senators have already made requests for the bills because of their districts. So, when you've drafted a bill, you can give it to one of them. So, if there is somebody that has a particular interest in an area--for example, Senator Lindeman's always had parental participation, you know she is going to do it again. It's just, you know, who's interested and who wants to carry it.

By the same token the focusing of attention on personal interests means that a legislator might not devote much time or effort to understanding education issues. Frequently we heard remarks like, "well, I just haven't been in on policy development in"..."some area" (Arizona, Legislator). Sometimes, this lack of personal interest causes serious problems within a policy committee. As we reported in Chapter III, the Oregon House had to expand the membership of at least one policy committee because of a lack of interest in its work by some members. Of one member we were told,

> he's worthless and he didn't participate--I haven't the foggiest idea about what his opinion was on anything. I mean, he wasn't even there most of the time.
>
> (Oregon, Legislator)

while another member of the committee

> was always doing the Republican business, so he wasn't a very active part of the committee.
>
> (Oregon, Legislator)

Interest alone, however, is not enough. To be effective, legislators must "do their homework." Ineffective interest orientations are described in terms like:

> He gets on a kick, people call it a kick--'Learn, earn, reimburse for higher education.'--He gets nowhere because he just voices slogans. He doesn't do his homework. He doesn't convince. He doesn't lobby his fellows. So people kind of laugh at him. He's laughable.
>
> (California, Lobbyist)

A summary of the most important alternative approaches to the legislator role is presented in Chart B. As suggested by the arrangement of the figure, legislators tend to approach their decision-making responsibilities by focusing either on the substantive content of the issues to be decided or on the dynamic interaction processes through which decisions are made. Of course, legislators may try to keep both issue content and decision-making process in focus but this typically proves extremely difficult. On the whole, legislators find it necessary to choose one approach or the other, or perhaps to shift back and forth from one approach to the other on different issues or at different times. When focusing on the issues legislators tend to emphasize the importance of public values and technical knowledge, whereas adopting a decision-making process focus is accompanied by an emphasis on "getting results" and "developing a consensus."

As suggested by the numbered rows in Chart B, there are five characteristic elements which distinguish the two primary role approaches. First, legislators may conceptualize the nature of the decision-making in which they engage as primarily a matter of defining issues and formulating the policies appropriate to the resolution of those issues, or they may feel that there are many competing proposals presented to the legislature and that the primary problem is to judge the merits of these competing policy proposals. A policy formulation thrust leads, of course, to taking an issue focused approach, while a proposal judgment thrust leads to a greater concern with the decision-making process.

Chart B

ALTERNATIVE APPROACHES TO THE ROLE OF LEGISLATOR

	Issue Focused Approaches (Emphasizing Values, Knowledge)	Decision-Making Approaches (Emphasizing Results)
1. Conception of the Decision Problem:	Formulating Policies	Judging Proposals
2. Representation Thrust:	Ideas	Constituents
3. Motivation for putting issue on legislative agenda	Creating or Setting Priorities	Choosing Among or Discovering Priorities
4. Basis for achieving leadership	Knowledge Reputation (Expertise)	Political Skill Reputation (Effectiveness or Power)
5. Non-leadership bases for action:	Trying to understand the issues	Deciding how to vote

A second element in the typical legislative role choice has to do with the nature of representation. Legislators may choose to represent either ideas or constituent groups. That is, at any given moment legislators may feel that they are working primarily for a particular policy outcome or for the demands of a particular interest group. Emphasizing the representation of constituencies leads to a process focus while representing policy ideas leads to an emphasis on substantive decisions.

The third approach element found in our data concerns legislators' motives for trying to put a proposal onto the legislative agenda. Issue focused legislators tend to see themselves as creating or setting public policy priorities, while the process oriented legislators tend to see the priority problem more in terms of a need to choose among competing priorities or perhaps a need to discover the "real" priorities among the incessant demands which are made upon them.

The fourth element presented in Chart B reflects our realization that an issue focus leads to a different view of legislative leadership than that emphasized by those taking the decision process approach. Legislators who approach their role from the issue perspective seek for themselves, and recognize in their colleagues, leadership based on knowledge or expertise. By contrast, a process focus leads to the view that leadership is rooted in political skill and power. Thus the issue focused legislators seek and respect reputations for understanding the complexities of such matters as budget and finance, special education, vocational education, or teacher certification. Process focused legislators, however, are more likely to seek and respect reputations for "knowing where the skeletons are," being able to "persuade," "massage egos," or "twist arms" effectively, or being a "legislative leader" in the party caucus, committee room, or on the Rules Committee.

As the last set of entries in Chart B indicates, most of the time legislators are not so much concerned with exercising or acquiring leadership as with resolving dilemmas and making their own personal decisions. Issue focused approaches lead legislators to see these decisions in terms of gaining an understanding of the pros and cons of the issues being resolved. Process focused legislators, however, tend to see the problem as a matter of deciding how to vote. From this latter perspective, decisions are much more likely to be made on the basis of who can be trusted, or on the basis of confidence in the thoroughness of a particular committee's hearing and review process rather than on the basis of an independent assessment of the proposal itself.

In sum: a review of the evidence in our taped interviews supports three generalizations about the ways in which legislators approach their decision-making roles:

1. The education policy committee members are much more likely than fiscal committee members to be issue rather than process focused. A major exception to this generalization arises in the area of school finance legislation. In the case of finance, fiscal committee members see themselves as the issue experts and are generally accepted as such by the rest of the legislature.

2. The aggregation process (i.e., the creation of consensus on, or at least a coalition of support for a proposal) is the common ground of the legislator's decision-making responsibility. Articulation (i.e., formulating of proposals) and Allocation (i.e., setting priorities among broadly accepted proposals) tend to be specialized tasks. Typically, articulation oriented legislators operate out of an issue-based approach and serve on the education policy committees, while allocation oriented legislators tend to take a process approach and to serve on the fiscal committees. The aggregation process tends to involve an interaction between the issue and process approaches to the legislative role, and to be influenced strongly by both knowledgeable expert leaders and skillful political leaders who take an interest in the policy under consideration.

3. Those legislators who are sensitive to the necessity (rather than merely the opportunity) to specialize within the legislature also tend to be the ones who are most concerned about and sensitive to the development of reputations for either careful work or energetic action on the part of both individual legislators and the legislative committees. That is, the more legislators feel that they must specialize in order to make effective contributions to policy the more they become concerned with the adequacy of the contributions being made by others. As a result, these legislators tend to be more concerned with the adequacy of information, the openness of the legislature to all interests, and the quality of staff support services available to committees or individual legislators.

Variations in Legislative Staff Role Taking. The interview data highlight three factors affecting the way legislative staff members approach their work roles. The first factor, and the one creating the most obvious differences among staff members, is the type of position which an individual holds. Staffers who serve as personal aides or alter egos for an individual legislator tend to hold basic conceptions of their jobs which differ substantially from those who work in more highly organized and professionalized staff units such as budget or legal staff offices or legislative research offices. Legislative committee consultants occupy something of a middle ground, generally tied to their committee chairmen with the same sense of personal loyalty and responsibility found among the personal staffers, but also able to identify with the more universalistic decision-making or policy analysis norms characteristically found among staffers working in a legislative research or budget analysis unit.

There are two features of the personal staff position which give this role its special character. First, personal staff members are in close, intimate, daily contact with the members for whom they work. As a result their work responsibilities are interpreted as a matter of "helping the boss to be effective." This responsibility may mean rapid changes in task assignments or intensive investigation of crucial issues, but it always means acting on behalf of the member (not simply pursuing the policy issue itself). An Oregon legislator stated,

> Quite frankly, had I not had a staff assistant last session I would have been really strapped with handling constituent problems. On paper I had ten free hours a week but committee

> meetings, appointments, etc., took all that time. I had no time during the 8:00 to 5:00 period to look at mail, to read, to write any of that stuff. And so, my assistant was really valuable because he could do phone calling during business hours and get the information necessary to help solve constituent problems. He could handle the problems himself or enable me to handle the problems more promptly.

Or in the case of a California legislator,

> I have someone who works on my staff who covers various kinds of issues and, in the case of education, makes a compendium of the materials I get on education and gives me the conclusions to be found in those materials.

The second feature of the personal staff role is its essentially political character. The personal staffer is expected to be constantly aware of the need to build and maintain working coalitions on matters of legislative interest. One California personal staffer described the nature of these responsibilities when she said,

> I handle all of his legislation. I am responsible for drafting it, for working with committee consultants, for gathering all types of research information. I write testimony, see the people who are lobbying on a bill, and provide the assemblyman with a full report.

And a California legislator told us,

> When I put in a bill, they lobby the bill, they reach out and forage for witnesses. They send letters and talk to all the interested organizations in the state and urge them to get behind the bill. I have often said, "My rod and my staff, they comfort me," but the fact is the staff does. And I rarely need the rod. My staff is very good.

Staffers working in legislative research offices are generally more removed from the immediate give-and-take of legislative interaction. This greater social distance gives them a chance to develop a fuller understanding of specific issues and to contemplate the implications of various policy options that are not immediately attractive to the members themselves. This opportunity for greater concentration and more leisurely consideration of options gives research staffers the capacity to develop important new policy ideas, but it also means that they must be concerned with whether members will be willing to accept their guidance. An Arizona research staffer highlights this relationship in commenting that,

> Initially what the staff comes up with may be great--and maybe it's not. I always take a draft to the senator for whom I'm writing and sit down and go over it. If there's something we don't like about it then I can change it. I've gotten to know my senators pretty well this last year, so I haven't had much trouble with them trying to change things. They have been pretty satisfied with the bills as I have drafted them.

Two factors complicating the role differences initially created by the type of position one holds are the interests of superiors and identification with professional standards. As employees, staff members have to be sensitive to the wishes or directions of those who pay their salaries. This is particularly important for legislative staffers because they generally have no civil service, tenure, or seniority protections built into their jobs. When legislators say things like,

> I was very disgusted because our staff person. N________, I felt, did nothing. Here we had a committee that only met twice a week, in contrast to the three meetings each week for the Education Committee. In comparison with the education staff consultant this woman did absolutely nothing...I felt it was criminal how little research N________ made available to us.
>
> (Oregon, Legislator)

they will not be ignored for very long by those who hire and fire the legislative staff. There are, of course, great variations in the desires and expectations various members have regarding staff assistance. And there are similar variations in the standards with which they evaluate staff performance. If staffers wish to survive in their jobs or to influence legislative decisions, however, they must be responsive to these variations and to alter their work patterns to accommodate them.

The development of universalistic professional skills and attitudes, particularly among committee staff consultants can, to a significant extent,offset variations in the expectations and demands of individual legislators. Defining the staff role as a professional one--characterized by responsibility for dealing with legal, fiscal or social complexities, which stand between the legislator's intentions and the specific policies which permit them to realize their goals--gives the staff member a secure and highly influential role in the decision-making process. Staff members who approach their work as technical professionals and who work for legislators who appreciate the importance of such technical support are able to gain a great deal of autonomy and soon come to see themselves as primary actors in the legislative decision-making process. As one thoroughly professionalized senior committee staff consultant in California put it,

> The more technical a proposal is the more members rely on the staff···it's very difficult in a public forum to deal with some of the complexities of a credentialing law--or for that matter to deal with the complexities of a school finance measure. Thus, an attempt is made to resolve these complex issues at the staff level, to try and develop a consensus among various staff actors who are involved and then--at that point in time--you go to the members. Sometimes it doesn't work that way. Sometimes a member will raise an issue or a series of issues which staff are working on at the same time, but a great deal of what was accomplished [on the teacher credentialling law] was accomplished in meeting rooms such as this one we are in now

> with anywhere from four to ten people. And those people were the consultants to the committees concerned and some of the lobbyists of those interest groups most deeply concerned with the issue.

At another point, this same staffer told us,

> Staff deals in the realm of the practical and the possible, and there were some things that were just discarded because they just didn't make good policy sense. There were others, which we just didn't think would work politically because they would create basic conflicts between the interest groups.

And again, speaking of his own personal contribution to a bill, he said,

> Oh, it was basically drafting language, this type of thing, making suggestions, arguing with members as to what is appropriate, what isn't appropriate, that type of thing. Just the normal type of bill writing and amending we always do as staff.

Another senior California staff member told us how important a former staff professional had been in affecting the passage of collective bargaining for teachers in that state,

> Well, on the collective bargaining bill, the key actor was John Bukey. I would say that he was the key draftsman and the key negotiator. I sat in with John and we worked out some policy alternatives and things like that, but as far as the actual day to day work on that bill--it was John. I guess I sat in on every key decision, played a part in the discussions that were involved, and did some of the "mau-mauing" that you do to try to get a bill through, but it was essentially John's good work that caused it to pass.

As these remarks suggest, for the professionalized staffer, the legislators themselves recede somewhat into the background and specific policy issues or the politicking required to produce needed coalitions of support for new legislation became the center of thought and action.

In trying to integrate their own professional standards with expectations regarding their work which came from their legislative employers and the constraints imposed by the type of position which they occupy, legislative staffers usually adopt one of two basic approaches to their work roles. One group of staffers find that their work is issue driven, in the sense that their attention and the bulk of their energies is focused on dealing with specific legislative issues. The work patterns for another group of staffers is agenda driven in the sense that they try to keep up with a broad array of important issues as they are moving through the legislative process, and to provide appropriate and timely assistance to the legislators when those issues "come up" on the legislative agenda for action. An issue-driven work style is illustrated in the following remarks by a California staffer,

> I headed up a study team of legislative staff members who spent two or three months out in the field visiting school districts and seeing how the collective bargaining statute was implemented. We mainly concerned ourselves with districts that had difficulties...to see whether it was the statute that caused the problem, or some other elements that caused the problem... . Next year we'll go out and look at some more districts, and we'll keep that kind of legislative oversight on the statute.

An agenda driven work style is illustrated by another California committee consultant who said,

> You have to understand that the legislators see a huge volume of bills and are trying to make decisions. They really depend a great deal on staff, on people like me...to comb through a piece of legislation and to point out technically where the thing is unworkable or where there might be conflicts, and also to deal with various people that have trouble with the bill... . That's why our function is to provide written analysis of legislation that they all receive as a way of explaining to them the technicalities of the legislation. So we're responsible for a translation--to say in simple language, this is the impact a bill is going to have... . A large bill moving at the busiest time of the year is not likely to be closely read. It's more likely that they're going to let the staff read it, and let the staff tell

> them if there are any potential problems, or who has called and said what about the bill.

The difference between issue driven and agenda driven work styles is not just a matter of individual staff member preference or work situation. Whole staff units frequently adopt one approach or the other. Members of legislative counsel staff, for example, are almost always agenda driven. They are responsible to review the language in virtually every bill and to draft bills on demand for all members of the legislature. Staff members working for most special committees or for interim task or study groups nearly always see their work in terms of a narrow cluster of issues. Perhaps the clearest example of the contrast between issue and agenda driven staff work is seen in the difference between the offices of Assembly and Senate Research in California. Much of the staff effort and energy in the Assembly Office of Research is directed toward the development, refinement, and circulation of what is called the "Third Reading File." This file consists of a staff analysis of the effects and the rationale for and against every piece of legislation passing through the Assembly. On the Senate side, however, the Office of Research makes no such comprehensive effort to follow the entire legislative agenda. Senate staff researchers see themselves as issue specialists, making intensive studies and developing comprehensive policy analyses in relation to specific policy areas. The Assembly Research staff expects to be able to offer the members of that chamber definitive interpretations of the bills being considered, while the Senate Research staff tries to offer definitive interpretations of policy issues from which legislation might then be revised or developed.

Of course, staff members sometimes shift back and forth between issue and agenda based approaches. Large complex issues, such as court mandated finance reforms, political movements for teacher accountability, or demands for student competency testing require the development of complex legislation which has to be drafted. Thus, the emergence of such issues creates a need for issue-driven staff work. By the same token, legislators may find themselves confronted with many specific proposals and no clear basis for making decisions about them. This will result in shifting staff to an agenda focused mode of operation. On the whole, however, staff members display fairly clear commitments to one mode of operation or the other.

In terms of their contributions to the legislative workflow, it is clear that issue-driven staff members make their most important contributions to the articulation of interests and the subsequent drafting of legislation. Legislative oversight also requires an issue focused staff effort. Only a persistent interest in particular issues or problems ever leads a legislator or staff member to follow up on the effects of statutes after they have been enacted. Agenda-driven staff work, by contrast, makes more direct contributions to the aggregation and allocation phases of legislative decision-making. When staff work is agenda-driven it provides information and insights which are timed to coincide with the "moments of decision" encountered in committee rooms or on the floor of the legislature. Thus agenda-driven work has a greater chance of convincing a member to vote for or against a specific bill, while issue-driven staff efforts have a greater impact on the formulation of the bills in the first place.

Variations in Leadership Role Taking. The elected leaders within any legislature occupy roles which differ quite substantially from those of the other members. For a number of complex reasons, most legislators carry on a rather intense love-hate relationship with their leaders. On the one hand, leaders are loved and strong leadership roles encouraged because the members recognize that the legislative decision-making process bogs down without leaders who can and will exercise broad and sometimes quite arbitrary discretionary power over such matters as committee assignment, bill referral, legislative agenda setting, and occasionally even voting behavior on specific issues. On the other hand, the leaders are hated because the members feel that they are themselves both capable of and responsible for controlling the legislative process--and they are constantly tempted to rebel against their leaders or at least to resent their exercise of power.

To the casual observer of state legislatures the importance of a powerful and effective leadership role may not be entirely obvious. There are two characteristics of the legislature, however, which make strong leadership crucial. First, the legislative task (i.e., enacting laws) is by its very nature a highly unitary one, requiring that budget allocations be made only within the limits of available resources and that legal rules be integrated into a single, sensible, unitary and non-contradictory code. Thus, every proposal for the formulation of new laws or the allocation of new budget resources must be tested against all other proposals (both past and present) in order to maintain the integrity of the legal codes and the state's budget. When they first arrive at the state capitol, however, the legislators are not adequately organized to perform this complex and vital monitoring and integrating task. Indeed, each legislator arrives at the capitol only after having made various promises to "do something" for his/her supporters and constituents. And these promises may be quite at odds with the promises made by other legislators or call for changes in policy which would be quite offensive to constituencies represented by others. Consequently the legislature as a whole must devise ways to perform a task which none of its members are individually motivated to attend to. Every legislator wants proposed changes in law or budget to be integrated into a unitary system of law and expenditure, but none want this need for a unitary result to interfere with their own personal legislative goals. A strong and even arbitrary leadership is the way to achieve this result. By charging the leaders with the responsibility for producing integrated final outcomes, the individual members of the legislature free themselves to pursue narrower and more specific interests. A California Assemblyman connects the power of the Speaker to specific legislative accomplishments when he says,

> The Assembly is highly partisan. The Speaker chooses all the committee chairmen, all the members of every committee and assigns where the bills go. I believe that is a good

> system, more good than bad. It makes it possible for you, working in concert, to put through major reform type legislation by working together.

The second characteristic of the legislature which makes strong leadership vital is its ongoing competition with the executive branch of government for political legitimacy and the exercise of public policy leadership. Discussions of the "power of the Presidency" are now commonplace in American politics. What has not been adequately highlighted in these discussions, however, is the potential for balancing executive power through the creation of a tightly organized hierarchically controlled legislature. Strong legislative leaders, such as California Assembly Speaker Leo McCarthy, can and frequently do challenge the legitimacy of a governor's public policy proposals (see McCarthy's editorial in the Los Angeles Times of January 14, 1979). Challenges to a governor's policy leadership offered by individual legislators (no matter how many individuals do so) are generally quite ineffective. A governor claims to represent "the entire state" while each legislator has only a special interest constituency. Only by creating a powerful legislative leader who can speak for the entire legislature can the legitimacy of executive branch policy leadership be challenged. Thus, every legislator becomes more powerful vis-a-vis the governor when all embrace the creation of strong legislative leadership roles with the capacity to create and enforce unitary legislative policy positions.

There is also a vitally important practical reason for the emergence of strong leaders within the legislature itself. By according their leaders the power to manage the legislative process legislators reduce greatly internal struggles over procedure which sap their all too limited time and energy. If rules of procedure and management discretion are localized in the leadership group, then only one real battle for control over the legislative machinery is necessary and the individual members of the legislature can get on with their work as policy makers once the leadership group has been selected. That is why a member who believes a bill has been mishandled knows that the only real recourse is to convince or overthrow the chamber leadership, not to try to change legislative rules or challenge individual committee chairmen.

Generally leadership roles are filled during the first few days of a legislative session and remain unchallenged for the entire session. Occasionally, however, there is a successful challenge to the leadership during a session--as happened to Oregon Speaker Phillip Lang during the 1977 legislative session. An Oregon Senate Leader described the resulting disruption in the House as follows:

> The House of Representatives was in an uproar from about the middle of the session on. They deposed the Speaker, had a six member committee that handled all the bill assignments and took virtually all the powers of the presiding officer away from him. The House was much weakened after that and put the Senate in an extremely powerful position vis-a-vis the House. The President of the Senate could speak as one voice for the Senate membership but the House leadership could no longer promise that.

Generally an overt challenge to the authority of an elected legislative leader is interpreted by all observers to mean that the leadership is "weak" and that the chamber in question will be much less effective than could otherwise be expected.

Within this context of being much needed but little loved, legislative leaders must find an approach to their roles which is both personally satisfying and operationally effective. Our data suggest that there are at least four factors which create variability among legislative leaders' role behavior. The first factor of importance is the simple matter of an individual's willingness to exercise the substantial powers of the office. Some individuals find it much easier to give directions than others.

A second important factor is the security of a leader's grip on his/her office. When the margin of election to office is large, the leader can pay more attention to political issues outside the legislature. When there is a viable challenge from other potential leaders, the internal management of the legislature becomes paramount.

Parallel to this matter of security of the leader's own position is the intensity of potentially disruptive centrifugal forces within the legislature. Are there strong tensions between political parties? Between urban and rural interests? Between conservatives and liberals? If so, the leaders will need to pay careful attention to managing decision-making and will have less time for public policy leadership and less capacity to challenge the governor.

A fourth factor often affecting leadership role approaches is the development of a crisis or challenge from outside the legislature requiring a unitary response. The passage of Proposition 13 in California precipitated dramatic and highly centralized legislative action which strained the limits of that legislature's leadership capacity.

With regard to the legislative decision-making process, leaders typically adopt one of two basic approaches. Those leaders who are comfortable with the exercise of power, secure in their position and not threatened by centrifugal tensions within the legislative chamber tend to take an agenda setting approach. Such an approach was illustrated by the president of the Oregon Senate who said that he viewed his emphasis on the development of a proposed constitutional amendment regarding school finance as a "prerogative of leadership" which was given to him with his election to the legislative leadership. As he put it,

> One of the reasons why you are elected as a leader is so that you will identify the policy issues needing priority attention.

Leaders who are less secure, less comfortable, or more troubled by internal tensions will generally adopt a decision management style. That is, they will focus on "rounding up the votes," keeping legislators from pursuing narrow constituent interests at the expense of the need for developing chamber wide consensus, and monitoring the flow of bills from committee to committee. This style is also prevalent among second echelon leaders such as party caucus chairmen. A California majority leader illustrates this approach well when he says,

> I guess my responsibility was to help round up votes for what we perceived as the administration position--which is what I did. We had to appeal to people's consciences and the need to get legislation moving and stop roadblocks, and I think we were successful in doing that. So I viewed my role not so much as substantive, but rather as one of expediting the passage of the bill--an expeditor.

In both of these approaches to leadership, concern with understanding the details of most legislative issues tends to disappear. The leaders expect other legislators to perform the articulation tasks, identifying the essential elements of most issues and formulating specific legislation. The leaders tend to focus much more intensely on the allocation phase of the workflow. They tend to think and talk about *priorities* for legislative action rather than about the specific provisions of the policies receiving priority attention. An Arizona leader highlighted for us the tendency of all leaders to think in terms of *who* is taking responsibility for an issue rather than *what* a proposal contains when she said of special education legislation,

> it's not one of my priority issues. I support it, but I'm not leading the fight. Actually, as far as the Senate goes, there's nobody leading a fight in that area right now.

There is one general exception to this tendency among leaders to focus on the level of priority to be given an issue rather than its substantive content. That exception occurs when the legislative action is stimulated by specific and undeniable external pressures or conditions. School closures due to budget referenda failures in Oregon, the passage of Proposition 13 in California, and the building of a nuclear power plant with a property value greater than the most populous counties in Arizona all precipitated direct and intense leadership involvement in specific legislative actions.

Variations in Executive Branch Role Taking. Our evidence regarding the way executive staff members in governors' offices and state departments of education approach their work roles is somewhat fragmentary, but it still offers a few important insights into the impact of this group of key actors on the legislative decision-making process. Perhaps the most important feature of the executive staffing pattern is the specialization of functional responsibilities which develops. In some state departments of education (SDEs) legislative liaison is given high priority, with the state superintendent of public instruction taking a direct personal interest in formulating and shepherding programs through the legislature. In other states, the Superintendent defines his/her office primarily in administrative terms and thus gives much less attention to proposing new legislation and concentrates instead on administering existing programs and trying to secure adequate funding through the governor's budget and/or through lobbying with finance committees. Among our three states, California's superintendent was clearly the most strongly committed to taking political and policy leadership while Arizona's superintendent was most strongly oriented toward an administrative definition of the responsibilities of her office. This contrast, among other things, is easily recognized by the fact that the status and influence of the legislative liaison office in California is much higher than is that of its counterpart in Arizona.

Off-handed remarks by three of our respondents reveal the extent of the differences as well as some of the reasons for the contrasting approaches taken by the different SDE s. Of California's superintendent, we were told,

> Riles got elected on a platform of trying to improve schools... He was elected at a time when there was a lot of criticism of the schools among the public and was the only one who specifically had a program to deal with it. There have been attempts by the

> legislature over the last ten years or more to try to cope with this...but his was the first comprehensive attempt to restructure the schools generally and it seems to me that it was even more a political program than it was a curricular program because it required a political process whereby parents were involved in decision-making to some extent.
>
> (California, Newspaper reporter)

Of the State Department of Education in Oregon, we heard it said,

> You have a State Board of Education appointed by the governor to make policy decisions at the state level. You've got a state agency, the State Department of Education to provide technical assistance in carrying that out. You may want to give some legislative direction to those two agencies, but the legitimate arena for making policy decisions is the State Board, not the legislature. And the reason we get into that is that we oppose legislated curriculum--period. Legislation turns policies into political issues rather than educational issues.
>
> (Oregon, Lobbyist)

While in Arizona it appears that,

> The State Board puts together recommendations for legislation every year, and then they're sent over to the legislature. From there they are developed and written if somebody wants them written.
>
> (Arizona, Staff)

In counterpoint to these dramatic variations in emphasis on the political versus the administrative functions of the SDE we found equally dramatic variations in the extent to which legislators and their staff thought SDE reports and statistical analyses could be trusted to provide either unbiased or adequate foundations for policy. The more politicized the SDE, the more it was viewed as just one more interest group, presenting only that evidence which supports its own interests. Our impression, however, (and it is only an impression) was that there is a strong interaction effect between the development of professional legislative staffs and full time legislators within a state and the emergence of this suspicion that the SDE is pursuing biased political rather than administrative goals. Perhaps the politicization of the SDE is a necessary response to the capacity of full time legislators with sophisticated staff support to undertake the development of comprehensive and reform oriented education policies.

Within the governor's office, the major alternatives in approach are not primarily related to tensions between an administrative and a political emphasis, but rather are controlled by the level of importance or political saliency attached to education generally or to specific educational issues that are being raised. When an issue becomes sufficiently important for a governor to give it his personal attention--as happened when Oregon's Governor McCall entered the school finance picture or when California's Governor Brown exerted his influence on behalf of governance reform elements of AB 65 (1977)--the influence of his staff in formulating and insuring passage of a particular proposal is dramatically enhanced. Typically, however, the governor's staff adopts a watchdog role limiting the financial demands of education, and trying to insure that programs are ideologically and operationally in keeping with the overall commitments of the administration.

Of course, the most powerful tool for legislative influence is the governor's budget. Within the framework of established policies, the governor's staff exert substantial, though indirect, influence over legislative action by controlling the budget allocations to be presented within the proposed budget. The preparation of this budget was, however, outside the purview of this research effort.

Variations in Lobbyist Roles. In our data, "lobbyist" is rather a catch-all title used to cover many different actors exercising significant influence over legislative decisions while working for any of a wide variety of public or private groups outside the state government itself. We lumped into this general category volunteer spokespersons for PTA's or the League of Women Voters as well as full-time professional lobbyists who represent special interest groups on a fee paying basis and the full and part-time representatives of teacher, administrator and school board groups.

Some lobbyists take an interest in many education issues, others deal with but a single bill. Some draft bills and then ask legislators to sponsor them, others offer only general ideas or express only broad concerns. Thus, any effort to generalize about the approaches taken to a lobbying role are necessarily over generalized and may conceal as much as they illuminate. We did note, however, one fundamental dimension which cut across all of the different lobbying roles, namely that some lobbyists emphasize the importance of careful utilization of information and analysis while others tend to emphasize the importance of their political power resources. The power-oriented approach was illustrated by an Arizona lobbyist who said that there is a strong feeling that,

> The Arizona Education Association has such power that when a bill is brought up in the House, there are legislators who recognize that they need to work out a compromise if they really want the legislation, because they know its going to die in the Senate if the AEA doesn't like it. That's a realistic point of view when people consider that. They are not supporting us, they are just saying, "Look I'd really like to see this pass, so let's work out some kind of a

> compromise."...There are other people in the House who, instead of trying to compromise and work with the known fact of AEA influence in the Senate, use this as a political platform--they attack every chance they get, they say "Our decision is being made by the union." And "why can't we support the good old taxpayers who are being sold out again.?"

Although his statement concerned the work of the California SDE, a California lobbyist gave us a good picture of how an information-oriented lobby effort becomes effective,

> The State Department of Education is heavily endowed with talent in special education...I'm impressed that when they speak for special ed they speak not only with the authority of the academic world behind them (they even bring in people to testify from University of California at Berkeley or Stanford) they know the facts and figures and the practices of their field. They also know the political realities of getting something done. That is one of the stronger departments of the SDE.

The power-oriented lobbyists emphasize the articulation of demands and the processes of politicking to build support for those demands. Information oriented lobbyists tend to emphasize the articulation of bills and the analysis of issues which would lead one to support or oppose those bills. Power-oriented lobbyists can and frequently do wait until later in the decision-making workflow to make their interests explicit. By waiting, the power lobbyist can avoid compromise and thus kill a proposal altogether. This waiting game is dangerous, however, because it requires that the lobbyist really have the power to deliver campaign support, votes, or media attention. If a power bluff is called, and no damage results, it not only means an immediate loss on a particular issue, but serious damage to one's reputation for power.

Information-oriented lobbyists generally seek the earliest possible access to the articulation phase that they can get. For this reason, well financed lobbyists have a much better chance of making their information count. They can afford the time and energy required to locate the places where interest articulation is going on and to nurture the social relationships required to gain access to these points of articulation. Once a bill has been authored, those who seek to modify it will be asked to show that they have political legitimacy as well as interesting ideas or important information.

To Summarize: there are two broad findings regarding orientations toward legislative decision-making and involvement in the legislative workflow broadly supported by our interview tapes. They are:

> Decision Making Finding #1. Within each of the work role groups we studied there are important variations in the approach individuals take toward their work responsibilities. These variations in approach are related to differences in each individual's position, personal interest and resources for influence, as well as the structural and political characteristics of the legislature and the state. Whatever their cause, however, the variations in approach taken by individuals are directly related to the ways in which they perceive and react to the decision-making work flow within the legislature.

Moreover,

> Decision-Making Finding #2. As individuals within each role group adopt a particular approach to their work responsibilities they find that their orientations toward the uses of authority, the importance of various reference groups, the relative significance of analytic and bargaining decision styles, and their reliance on specific mechanisms for decision are altered in meaningful and systematic ways.

D. ORIENTATION AND SOCIAL SCIENCE UTILIZATION

Up to this point we have been examining the overall context of legislative decision-making. We have presented evidence indicating that legislative policy decisions are best understood in terms of the flow of political interests and pressures through four distinct workflow stages (Articulation, Aggregation, Allocation, and Oversight). We have also explored the orientations of key legislative actors toward their decision-making responsibilities as they are encountered within each of these four workflow stages. We have reported that four primary orientation factors (acceptance of particular Reference Groups, adopting a dominant Decision Style, sensitivity to specific Authority Bases, and reliance on explicit Mechanisms of Decisions) account for major differences in the work role orientations of our respondents. We turn in the remaining pages of this chapter to an examination of the ways in which social science research and/or evaluation findings come to be utilized within the legislative decision-making workflow.

Before turning to evidence found in the interview tapes, two preliminary remarks are in order. First, although social science can be seen in terms of reference groups, decision styles, and/or decision mechanisms, it is the use of social science as an authoritative basis for decision which will be our primary concern. The reference group orientation factor would be helpful in isolating social science utilization only if we limited our definition of science utilization to those situations in which organized research groups (e.g., a university, the Rand Corp., etc.) are identified as critical factors in a decision. While this does sometimes happen it clearly is not the only, or even the best, indicator of reliance on social research. With regard to the decision-making style factor, it would be fairly easy to insist that scientific decisions are primarily rooted in analytical rather than bargaining approaches to decision-making. It is, after all, belief in the existence of a single unitary and objective Truth and the acceptance of a set of analytical and data based "methods" or principles of action for discovering that Truth which sets the practice of science apart from other modes of inquiry and decision-making. However, our data supports recent studies in the sociology of knowledge (see, e.g., Berger and Luckmann, 1966; Holzner, 1968--and particularly Thomas Kuhn's (1962) remarkable analysis of The Structure of Scientific Revolutions) in finding that there are important bargaining elements both within the scientific community itself and in the development of acceptance for scientific findings as the basis for decisions. Thus any simple equation of science utilization with the use of analytical decision styles would be misleading. As for reliance on specific mechanisms for decisions, there appears to be no basis for believing that science utilization is either unique to some mechanisms or totally absent from others. Of course, in sheer numerical frequency, we found legislative staffers to be the most familiar with, and the most likely to reference decisions to, social research. This was only a tendency, however, and did not seem to provide an adequate basis for interpreting the essential contributions of social research to legislative decision-making.

As an aspect of the authority factor, social science is clearly a matter of expertise rather than values, legality, or interpersonal charisma. That is, science concerns itself with right and wrong answers to questions, not with matters of good and evil, legal and illegal, or approval and rejection by influential others. As we will describe more fully below, however, scientific expertise is not the only form of expertise found within the legislature. Indeed, social science represents a rather narrow segment on the whole spectrum of expertise which is utilized in formulating and deciding legislative policies. Thus an inquiry into social science utilization involves four steps: first, distinguishing the authority factor from other aspects of decision orientations; second, distinguishing the role of expertise from the other modes of authority within that orientation factor; third, distinguishing the elements of scientific expertise from other types of expertise; and finally describing the impact of scientific expertise upon the decision workflow in each of its four major stages. In the foregoing sections we have described differences among the primary orientation factors and delineated the relationship between expertise and the other modes of authority. What remains to be examined is the relationship of scientific to other types of expertise and the impact of the scientific type of expertise on decisions at each stage in the workflow.

The second preliminary observation regarding social science utilization is that the process of social science utilization is largely independent from the process of social science production. Our data address, in some detail, questions regarding when, how, why, and with what effects social research and evaluation findings are utilized by legislative decisionmakers. Our study, however, provides little direct data on the two equally important questions: 1) what determines when needed research and/or evaluation will be produced? And 2) what controls the creation or operations of the storage and linking mechanisms which connect science production with the points at which decisions to utilize (or not to utilize) are made? Of course, production and linking processes control utilization to the extent that it is clearly impossible to utilize science which does not exist, and equally impossible to utilize that which does exist but does not become linked to the legislative system. These limitations on science utilization are not the primary focus of this study, however. Moreover, weaknesses in science production or in the linkage between production and utilization are not likely to be solved until we have described the utilization process itself and are able to understand the nature of legislative demand for supply of scientific findings which are already available.

Science and Other Forms of Legislative Expertise. The term "expert" occurs frequently in our conversations with key actors in the legislative process. To cite a few typical examples:

A staff member, recalling the development of certain finance legislation, said,

> legislators not involved in the issue look to experts they can trust. There are members in our house like Jerry Smith and Bill Campbell who have a great deal of expertise.

A legislator said of a staff member,

> She has become an expert about environmental issues that my office is concerned with. I can depend on her having researched the issues in detail and knowing who the expert witnesses are that can be called upon to testify.

And a lobbyist said,

> Senator Montoya is "Mr. Vocational Education"...Assemblyman Leroy Green has a staff that is simply incomparable in skill and knowledge.

A careful analysis of the taped interviews led us to recognize that the term "expert" has at least four distinctly different meanings for our respondents. Legislative decisions, we noted, are affected in important ways by "experts" with 1) legal, 2) political or legislative, 3) technical, or 4) scientific skills. Each of these four different types of skill are covered by the term "expert." However, each makes a rather different contribution to a legislative decision.

Legal expertise is the most basic and the most routinized form of legislative expertise. Every legislature has a well-staffed legislative counsel office where a bevy of lawyers serve the dual functions of screening proposals for conflicts with existing law and formulating into legally effective and consistent language the intentions of legislators who seek assistance in turning their ideas into concrete proposals. The expertise of the legislative counsel was described succinctly by an Oregon legislator who said,

> We used our legislative counsel staff--which is a team of attorneys hired to write most legislation, put it into legal language and make sure it's in final form--because they have been involved in the drafting of legislation and they know something about legislative intent beyond

> the words in the act. They were here and participated in drafting the amendments to the bill.

As suggested by this comment, legal expertise interacts in important ways with legislative intent so as to constrain and direct the legislature. Thus, in the words of the lobbyist we quoted in Chapter III,

> One of the cornerstones of anything that's done in the legislature is what was the legislative intent of a code section as it was written 15 or 20 years ago.

In addition to the legislative counsel staff, certain legislators and other key actors are considered legal experts with the capacity to render crucial judgments on specific legislative issues. We have noted earlier that California Senator Rodda has acquired widespread respect for his ability to interpret that state's complex education code. In each state we found that a few key legislators or their senior staff members were usually expected to screen legislative proposals to eliminate those which would conflict with existing laws. Respect for the importance of keeping laws consistent with each other is so basic to the legislative process that virtually any credible showing that the provisions of a bill are at odds with code sections not being specifically amended within it will cause an immediate suspension of consideration for the measure or insure that it will be abruptly returned to its author(s) for revision.

Staff members frequently play a major role in bringing legal expertise to bear on the development of legislation. We were told, for example, of the work of a California Senate Education Committee consultant who provided the legal expertise on which a collective bargaining bill for teachers was based. It was said that,

> He was the key draftsman, aware of possible legal implications when such simple words as "can" or "may" are used in certain sections of the law. He gathered and interpreted data on existing public employee collective bargaining legislation, and used some portions of that legislation to develop a legislative proposal that would meet the approval of the interested parties.

Some lobbyists, we discovered, are also considered to possess legal expertise. Some of these legal experts have acquired their reputations because they are practicing attorneys or former legislators, but others have simply proven that they have acquired a broad knowledge of the law and can interpret its implications for new proposals.

Political or legislative expertise contrasts sharply with legal expertise, but is no less important in controlling the legislative process. Descriptions of political expertise within our data include such phrases as,

> Dealing in the realm of the practical and the possible.
>
> Knowing where the dead bodies lie--the skeletons in the closets.
>
> 'running' a piece of legislation.
>
> knowing when there are several ways to achieve the same goal and which will be the most attractive politically.

or

> being able to twist arms.

Legislators and staff members who can,

> when putting a piece of legislation together recognize whether or not you can get enough votes for it,

or who can negotiate and reconcile conflicting ideas, make "trade-offs" which do not damage the intent of a proposed bill, or know how to nurture the support needed to insure final passage of a measure are recognized as political wizards or legislative experts. Among legislators, political expertise is implied when one is called a "leading statesman" or is recognized for an ability to "move legislation." Staff member political expertise is acknowledged in such remarks as,

> Richard Munn held us together by acting like a referee and yet getting us to recognize and accept what is sound and what is good.
>
> (Oregon, Legislator)

Similarly, among the lobbyists, political expertise is attributed to those who know what will and what won't "sell" or "fly," who can lay out facts and present convincing arguments, who can "call out the troops" on short notice, or who recognize that campaign contributions will buy a legislator's ear but not necessarily her/his vote.

Political expertise is particularly important to legislative leaders. Beyond the substantial powers of their offices, we noted that the most influential legislative leaders are those who acquire a reputation for being able to recognize and respond to the political climate of the state and the mood of the legislature. Expert leaders are those who have an overview of both the issues and the personalities within the legislature. They are able to "deal with well developed egos," to "isolate problem people out of the decision-making process," and to "set priorities for legislative action."

Technical expertise represents a third type of expert authority which plays a significant part in shaping many legislative decisions. Technical expertise arises in two distinct forms. One group of technical experts are those who can unravel the complexities of a proposal and determine exactly what effects it will have. This type of expertise is the special responsibility of certain legislative staff members who,

> comb through a piece of legislation and point out technically where it is unworkable or where there might be conflicts
>
> (California, Staff)

One legislator identified the importance of this type of expertise when he said,

> We were greatly aided in moving the bill by a very thorough analysis done by Senate Education Committee consultant, Jan Denton. She did a seven-page analysis of the bill which explained the technicalities, compared the legislation to previously passed AB 4040 and to the federal law PL 94-142. She stated in simple language just what the impact of the bill would be.

A second type of technical expertise is concerned with the ability to locate and interpret data regarding the problems toward which legislation is (or might be) directed. An Oregon legislator attributed this kind of technical expertise to the Oregon State Department of Education when he said,

> Lloyd Thomas and other staff members at the Department of Education are good at handling finance data and we have been able to get, within a day or so, complete computer print-outs which show the effect of just about any proposal on every school district in Oregon.

While technical expertise is most frequently recognized among either legislative or executive branch staff members, some legislators are also identified by their colleagues as bona fide technical experts on key issues. For example, an Arizona legislator said,

> There aren't many whom I would consider an authority on school finance. Former Senator David Krep knew more

> about it than anyone in the legislature--he even wrote a book about it. Senator Usdane is well versed in the technical details and Speaker Kelly understands the technicalities of finance law.

Or, to cite another example, a California legislator said of the Chairman of that state's Assembly Education Committee, "nobody can compete with Green's technical information."

Legislators and staff members also recognize the important contributions made by technical experts among the lobbyists. An Arizona legislator, for example, after describing the need for accurate technical data said,

> The professional lobbyist hired by the mines, for example, comes in, sits down and says, "let me tell you that I'm representing the mines. But if you ask me a question, even if its detrimental, I will give you an honest answer." As long as he doesn't lose his credibility by giving a dishonest answer, he's believed.

Scientific expertise is the fourth type of expertise recognized by our respondents. Scientific experts are similar to technical experts in that they concern themselves with data rather than laws or interpersonal relationships. Where the scientist and the technical specialist differ is in the way they analyze and interpret their data. Those legislative actors who are recognized as technical experts emphasize gathering and summarizing relevant data while those who display scientific expertise focus on the analysis and interpretation of the data. The scientific experts, in other words, are concerned not only about the effects of a piece of legislation, but also about its effectiveness. It takes technical expertise to know how the tax burdens or revenues derived from a particular school finance proposal will be distributed. It takes scientific expertise, however, to know whether the tax burdens will drive industry out of the state, or whether the revenues given to school districts will promote equality of educational opportunity.

The ability to handle scientific analysis and to relate scientific concepts to concrete policy choices is not very widespread among our respondents. For the most part, as we will discuss in more detail below, legislative actors find social science to be a cumbersome and not terribly reliable source of guidance for their decisions. When used competently and judiciously, however, it is recognized as an incredibly powerful tool for decision-making. It was said, for example, of one California legislator whose scientific capabilities are widely recognized that,

> His proposal for a moratorium on major school legislation, at first startling, was accepted and shared by a number of key legislators because he was able to prove that the overall framework is solidly in place and that we should now be supportive, providing the necessary assistance to permit schools to respond to legislation already enacted.
>
> (California, Legislator)

We noted in reviewing the taped interviews that the level of appreciation for and interest in social science research and evaluation findings rises sharply when there are more full time professional staff supporting the legislature and when the legislators themselves see policy making as a full time responsibility. California legislators and staff members displayed the most sophisticated social science expertise, followed by Oregon and then Arizona--in direct correlation with the extent of staff and full-time legislator role orientations. We also recognized, however, that all three states are rapidly expanding their capacity for generating and interpreting social research. Remarks by the Speaker of the Arizona House reveal a commitment on the part of legislative leadership in that state to increase that state's capacity for social science research and analysis. He said,

> Since I've been Speaker I have worked very diligently to increase our research capabilities. I have set up a staffing formula for use by the various committees in the House and I have also increased the pay so that we are competitive with other agencies of government and can retain expertise on our research staff once we gain it.... My policy has been that, with the lack of tenure in the membership of the House and Senate, we have to shore up the lack of expertise by hiring research capability. I think it's false economy not to have the best available information.

In the remaining pages of this chapter we will examine the capacity and inclination of various legislative actors to utilize scientific expertise in making legislative decisions and then examine what effects the utilization of social research or evaluation have on legislative decisions as they pass through each of the four stages of the legislative process.

The Utilization of Scientific Expertise

Having noted that social science provides one particular type of expert authority for influencing legislative decisions, we examined our data to determine when and why legislators turn to social research and evaluation, and to assess the impact of social science utilization on the individuals who use it and on the policy decisions to which it is applied.

Reminding us of the pre-eminent place of values rather than expertise in legislative policy formation, one Oregon legislator said,

> I think that the legislature has dealt with education pretty much from the standpoint of attempting to leave it up to the professionals and the local districts to make decisions so that the area in which the legislature has acted in education has been largely in the area of value judgments.

This same legislator, however, argued that,

> the legislature is guided by the facts that help determine whether or not a certain policy will achieve the end that they want.

Moreover,

> You never have all the facts, and you never have no facts. So you go on the basis of whether or not you have sufficient facts to provide a chance or possibility that the course of action will be alright, and you also judge how serious an error would be if you were wrong. If you made an error would it be a crucial one? So I would say that the legislature generally tends to go slow to limit its losses by reducing proposals to pilot programs or limited programs for one or two years. Or if the costs are great they back off entirely and wait for more facts or wait for some sort of device which can guard against excessive losses. I think that's the normal tendency--its not one of saying "Damn the torpedos, full speed ahead."

In the specific case of school finance, this legislator highlighted the impact on legislative decision-making which has resulted from improved research capability within the legislative staff itself. He said,

> In the area of school finance, the significant thing is that we have a director of the legislative office on revenue who is an extremely creative, competent person. He has been working in this area for a long time, so that, frankly, the progress of that legislation has been largely due to him and to a highly competent staff. They take any ideas that come, plus their own, and process them at great length--with a great deal of research--so that a good deal of the clarity in our deliberations on school finance has been the product of their pretty well designed models for computer analysis... that has eliminated an awful lot of the subjective kind of guessing about what's going to happen because we can just nail it down in terms of dozens of different factors and make comparisons on the basis of whatever criteria you want to use in judging a program. You can get the data to determine to what extent a program meets that criteria without much difficulty. It's a far cry from the way in which we used to deal with school finance ten years ago--where nobody ever knew what the real effect was going to be until a year later. I think this has changed tremendously the quality of the work we've done on school finance.

For this legislator, then, social science represents one major way of linking value judgments regarding the desired ends of policy with factual questions regarding the actual effects which will result if one or another policy proposal is adopted. Science is seen by this legislator as subordinate to values and as concerned with whether or not values, once identified, can or will be realized through specific legislative programs.

Although rather cynical in his tone, an Arizona legislator put his finger on the most controversial aspect of this type of social science utilization process when he asserts that the professional staff members in his state,

> sit down there [in their offices] and you tell them what program you want and then they justify it for you. That's generally what happens here in the House. You hire a staff person, you tell 'em what the aims are and what the

> end result is and tell 'em to justify it...you write a program or come up with something, this is what you want, and you tell 'em, "okay, now justify this. Write me something that's going to support it."

He was quick to acknowledge, however, that

> If you can't justify it, then you modify it until you can justify it.

Nevertheless, its

> "Give me a justification for this"..You have a preconceived idea. You write the program, and then bring the documentation in to fit the program.

Beneath the cynicism expressed in these remarks lies the brute fact that justification is a critical element in legislative decision-making. Those who cannot justify their proposals are forced to alter or abandon them. Sometimes, of course, justification has nothing to do with science or even with information. Justification may be based on political power, constituent demand, court decision, values, legal guidelines, personal respect for sponsors, or any of the other factors discussed in earlier sections of this report, but justification is essential. Social science can and frequently does play a crucial role in developing or challenging the justifications to be offered for a proposal.

One California legislator illustrates how the great bulk of justifications offered for legislative proposals are developed when he said that his information on bilingual education comes from, "personal experience, personal exposure, meetings with teachers, parents and children." Such a statement reveals the tendency of legislators to prefer personal experience to systematic research as the basis for their decisions. It also underscores the fact that social scientific analysis, if it is to be persuasive at all, must persuade individuals who have personal experience with the issues being resolved and who believe, in the absence of evidence, that they may know what governmental actions are required to resolve them.

Another California legislator offers the counterpoint to this concern with personal experience when he asserts that,

> I have a bias toward data. I like to know from the beginning that, as a matter of public policy, we have established a new program in such a way that, at some point, we'll have some longitudinal, respected data that can be brought to the decision-makers and someone can say, "Now, here's something that works, or here's something that we believe has worked with these reservations, and we can make a recommendation to you in terms of funding expansion made on this basis." So there will actually be something to see--kids at the third grade level here were at the 47th percentile and we brought them to the 60th and so forth...so frequently we don't do that. People use snipits and bits of data to serve their own purposes and we have an Assembly Office of Research but it's not used as effectively as it ought to be. Data just does not play the role in decision-making that it ought to play. And every time you try to inject the note, we have what I call the apologists who move in instantly and tell everyone how infantile the science of measurement/evaluation is and as a result how unimportant the data is and how culturally biased it is and so forth. I'll tell you, the decision-makers and the people out there just do not want to continue to hear this. What they want to know is--what's the best you know how to do? Let's accept that as a standard. ...let's accept some standard on which we can base decisions. ...The process has got to be more scientific if we're to continue to make decisions.

Such sentiments as these are both a demand and a rallying cry--a demand for increased reliance on systematic inquiry that goes beyond the personal experience of every legislator, and a rallying cry for those who insist that social science provides basic standards against which it is possible to measure complex policy proposals.

Even when they are committed to the general principle of social science utilization, however, legislators find problems in the use of specific findings. As an Oregon legislator put it,

> I think that there is, as far as setting educational policy or government policy in general, somewhat of a reluctance on the part of decision-makers to spend a great deal of time on scientific material because of controversies within the scientific community, within the educational community, or whoever the authority might be. So one might spend a great amount of their time and energy in researching only to come to the conclusion that the experts disagree down the middle on what the facts actually represent. Then the decision makers are right back where they started. They heard both sides and now they know both sides have been studied and conclusions have been drawn to support both sides. So there is some reluctance on the part of legislators to spend a lot of their own time. However, there is a desire--usually in the committee process--to bring people in who have either performed studies or who are scholars and are able to bring the options to the committee.

He goes on,

> so I would say that there is a reliance upon scientific data, but in the committee process. The legislators not related to that committee, I would say, do not rely heavily upon that kind of information in their decision-making process, because they do not have time to rely too heavily on it.
>
> However, if its a controversial issue, most of the time there will be scientific data presented on both sides in the debate on the floor. But then again, I'm not sure how effective that is. You know, in setting policy...if there is strong public feeling that is going to come first in the legislator's decision-making process. If the demand on the part of the public is strong that you do something about a

> problem, it usually means that you don't wait until next session, you don't wait until you perform another study to determine whether or not this study or that study is correct. You act, you have to act somewhat on a combination of the data that you have been given and on what you feel public opinion is. So there is a merging there of these two things in making a policy decision.

After some probing this legislator concludes that,

> In the interim many times we ask that studies be performed, or we call for the accumulation and analysis of data. But I would say that data being used for setting out the options is the most frequent use.
>
> I think, too, that if you are dealing in an area where several legislators have some expertise that data might be used somewhat differently. Then it might be used by a legislator who's pushing for a program. Such a legislator may distribute excerpts and then use that data to try to push his proposal and his feelings. Either push it or try to kill it with that kind of information. So legislators always have one eye open for data, especially if it will support their positions.

In fact,

> a study that has been conducted that would back their position is always one they keep on file and one they read.

Moreover,

> I would say that individual legislators with great interest in a particular area spend much more time and rely more heavily in making their proposals and decisions on scientific evidence as compared to legislators not interested in that particular area.

A California legislator suggests that the critical point for social science utilization comes somewhat earlier in the process, before committee hearings have begun,

> when one is in the process of drafting bills, that is when you look at research that's been done in the area.

He also recognizes, however, that data may not be available when needed, saying, with regard to bilingual-bicultural programs, that,

> If data is available we try to use it to determine policy. However, over all, I think we haven't yet had time to develop good information and to use it to evaluate present bilingual programs.

What emerges from these and numerous other statements found in our data is a picture of social science as a useful and sometimes a very powerful resource for influencing legislative policy. At the same time, however, pursuing social research findings is a time consuming, frequently frustrating, and sometimes downright confusing business. Equally clear in these remarks is the picture of social science as subordinate to questions of value and as only one among several sources of insight and information available to the legislators. Some legislators clearly believe that social science must be used more frequently to illuminate complex policy problems. Others appear to see no reason why scientific analysis is any more valid or useful than other, less cumbersome and time consuming methods of reaching a policy decision.

A closer look at what happens to the legislative policy making process when social science research or evaluation findings are actually introduced into it will help to illuminate why the problem, in our judgment, is not whether more social science should be utilized, but how and when it should be utilized--and what consequences social science utilization has on either the policies adopted or the relative influence of those who do and do not use social science.

How Social Science Utilization Affects Policy Decisions

Our data indicate that the utilization of social research or evaluation findings affects the legislative decision-making process in two important ways. First, as expected, social research serves several intellectual functions. That is, the introduction of research and evaluation data into the decision-making process has important consequences for how the key actors think about the issues they are involved in deciding. The intellectual functions of science change in form as a decision moves through the articulation, aggregation, allocation and oversight phases. During each phase, however, the introduction of research into legislative deliberations alters substantially the nature, and thus the likely outcomes, of legislators' thinking about the significance and/or the bases of their decisions.

The utilization of social science also serves important social functions within the legislative process. Since the use of social research involves, by its very nature, complex and to some extent abstract thought processes it transforms social relationships and patterns of interaction among key actors within the legislature. Individuals who would not otherwise be able to initiate action find that the development of scientific expertise gives them leverage on a decision, and others who would otherwise be key actors in the process are sometimes eclipsed by the introduction of research data and findings with which they are unfamiliar. Moreover, the identification and utilization of appropriate social research alters the development of coalitions of support or opposition for decisions within the legislature. As with the intellectual impact of social research, the social effects of science utilization vary from one stage in the decision making process to the next.

Utilization During the Articulation Stage. During the articulation phase, when basic policy interests are being identified and specific proposals intended to give legislative support to those interests are being formulated, social research findings make an intellectual contribution to policy problem definition and fulfill a social function by building group solidarity within major interest groups.

An Oregon Executive Department staff member identified a typical articulation phase decision-making situation in which social science research findings could be most helpful. In discussing the difficulties of distinguishing medical treatment from educational services which are needed by handicapped children, she said,

> The dilemma that I found is that everybody had a different definition for everything. Treatment can be physical therapy, occupational therapy, or it can be just someone giving one-to-one attention. And the legislation could not address the definition for either treatment or educational services...it only mandated that no medical treatments are to be provided with special education funds.

Not only did insurmountable problems related to defining appropriate special education services lead to adoption of a policy which was intentionally vague, but support for this vague and fairly expensive policy was based on an argument that,

> This will reduce the institutionalization costs for these children. But that argument may not last long--We don't know if that's really the truth.

As this staffer argues, in the absence of adequate, data based, definitions of a social "problem" arguments for (and against) policy proposals tend to involve exaggerated and probably ill-founded claims about what the proposed policy can be expected to achieve.

A contrasting situation was described by a California legislative staffer discussing the articulation of major public school staff development legislation in that state. This staffer told us,

> AB551 is modelled on the research that was done by the Rand Corporation. I've never seen a bill that is linked so closely to research...551 provides a framework that will allow each of the components cited by the Rand research to emerge.

This staffer's description of how a link between social research and this legislation was actually effected is illuminating and worth quoting at some length. We were told,

> Assemblyman Hart wanted to do something in the area of staff development. He had carried a bill, AB1307 in 1976, and that bill did not fare well. He was very interested in the subject and had developed the earlier bill based on some interim hearings that he held. But we actually put the bill together quite quickly. That bill was killed in the Assembly Ways and Means Committee. Nevertheless he wanted to continue looking at this and his strategy was to do some reading in the area, and also to convene a statewide advisory committee on staff development made up of school board members, administrators, parents, representatives of parents, teachers, other school staff and post secondary educators. That statewide task force met for months, starting in the fall of '76. We got a lot of input about the staff development component of the [already operational] Early Childhood Education program and on other approaches to school reform from that committee. It was, to my mind, an excellent vehicle to try to get that kind of input.
>
> As a result, the staff development component of AB65 (the major finance and reform bill of 1977) is identical to the staff development component of the Hart bill, which is AB551, which is based on the McLaughlin [Rand] research. But it was the McLaughlin research confirmed, approved, or affirmed by the statewide task force. So that task force played a key role, I think, in the development of both the Hart staff development bill (AB551) and the finance and reform package in AB65.

After describing at some length the linkages between California's Early Childhood Education program, the staff development interests of Assemblyman Hart, and the major educational reform components of AB65 (1977) which were built largely on the work of a State Department of Education Commission created to study and make recommendations regarding the Reform of Intermediate and Secondary Education (the RISE Commission) this staffer continued,

> what we came up with substantiated the principles underlying the ECE program which had been based largely on input from educators in the field and on some common sense notions about education, but was not based on hard research. At least that is my belief, because when we asked them to substantiate the RISE proposal they tended to say, "because we know it will work" without referring to specific research that would document their beliefs. Surprisingly, then, we found that our review of research confirms the notion--the hypothesis--that educators do, in fact, know what they're doing. Educators in the field know what works and the Rand research simply substantiates that.
>
> Just as a side note, when Milbrey McLaughlin, who was the principal investigator for the Rand study, speaks to teacher groups about her research, the tendency is for teachers to say something like, "Right on! Yes, that makes sense to us." The research substantiates things teachers have been saying for years, and vice versa. So we relied, I think, quite heavily on research.

The picture of social science utilization painted by this staffer is, in our judgment, critically important and often not adequately appreciated. The central point in this story is that there is a vital link between the intellectual and the social functions of social research. The reason Assemblyman Hart's original staff development proposal "did not fare well" was because there was no common understanding of the problem toward which it was supposedly directed, and thus no established reference group to support it. By creating a task force representative of all education interest groups and then utilizing the Rand Corporation research to establish a common universe of discourse and common understanding of the staff development problem within that task force Assemblyman Hart and his staff were able to create the needed group solidarity to enable this task force to become a major factor in the legislative process. It is important to recognize the difference between teachers acknowledging the validity of the McLaughlin research and their ability to form a cohesive group solidly behind a particular approach to staff development legislation.

Again and again in our field interviews we heard references to the use of social research to provide otherwise disparate, unorganized, and potentially conflicting individuals or groups with a common frame of reference or universe of discourse for interpreting a policy problem and identifying a proposed solution. This clearly happened in the case of a loose coalition of groups interested in bilingual education in Oregon, in the development of a Master Plan for Special Education in California, and in the formulation of a response to the federal special education mandate (PL94-142) in Arizona. Of course, social research is not the only vehicle for generating this vitally important group solidarity. For instance, California's collective bargaining support group was welded together by reviewing other collective bargaining statutes (tacitly agreeing to keep California's statute within the mainstream) rather than by examining research findings on the effectiveness of alternative bargaining arrangements. And the creation of needed group cohesiveness for finance reform in California was, apparently, made possible only because of the constitutional crisis precipitated by the Serrano decision. Quite frequently, however, we found that the articulation of major legislation was strongly influenced by the conceptualization of a policy problem implicit in a piece of social research. Frequently, of course, the groups whose cohesiveness was based on critical social research concepts were only vaguely aware of their indebtedness to research. Frequently the articulation groups emphasize the political importance of developing a consensus on the definition of a policy problem without being aware of how important concepts and ideas borrowed from social research have been in the development of that consensus. An Oregon staffer put the process in what we came to recognize as its proper perspective, however, when he described the development of a finance reform law in that state. He told us,

> The governor appointed a task group of technicians at the state capitol to come up with some alternatives to deal with the financing of public education. And that committee went back, it seems to me, to the major study of school finance in Oregon sponsored by the Ford Foundation. They went back to what the Ford group had done, used a lot of their analyses and a lot of their thinking. The Ford group had defined the terms of the debate.

At another point, this staffer said,

> The work of the Ford group, it seems to me, did a great deal in clarifying the issues surrounding the financing of schools, and particularly the equalization issues involved.

Thus, the key terms for describing the intellectual contributions of social science to the articulation process are definition and clarification. This conceptualizing and clarifying function, however, generally operates within identifiable task oriented interest groups, committees, commissions, staff units, or other groups who are seeking to prepare and initiate action on specific legislation. With impressive regularity, legislation which has been prepared by a single individual--regardless of his/her position or the objective merits of the proposal--fails to get serious attention by the legislature. To be effective, a group seeking to get the legislature to act on their proposals must be able to speak with a unified voice--offering a common description of their problem and a consistent rationale for how a proposed policy could resolve it. Thus the defining and clarifying function of science is just as important to a group wrestling with the articulation of an issue as it is to framing the specific policy proposals they are developing.

On the whole, we were surprised both by the extent to which social science regularly influences the articulation of major legislation and by the extent to which the important contributions of social research in this process have gone unrecognized in the scholarly literature on utilization and among legislative actors themselves.

Social Science Utilization in the Aggregation Phase. Once policy proposals have been developed and legislative actors begin to shift their attention away from articulating desired policy changes and onto the aggregation of support (or opposition) for these proposals through persuasion, amendment or political bargaining, social science acquires new and different functions.

A California legislator reveals the shift in perspective associated with this transition from the articulation to the aggregation stages in the legislative process. In characterizing the types of information which are most useful, she said,

> It depends on where you are in the process. At the very beginning I prefer to read. Sometimes I prefer to have people talk at me because there's just too much, there's a lot of data coming at me on some things and just no way I can read all of it. I just don't have time to--so I want someone talking at me for a half hour and giving me a briefing on something. Then I will get a briefing on a little different aspect of it from a completely different side.
>
> During the committee process, however, I read the bill and then I make a list of questions--things that I do not understand, or that I'm confused about in the wording of the bill. Or if I don't understand why a particular thing is needed. Or I look at the questions of our committee consultants--their questions are usually valid and I want them answered. At that point, after having read the bill and the analysis by the consultants, and the background material.... I go into a committee hearing prepared to ask the questions and understand the answers.

Thus the shift in perspective as an issue moves from articulation to aggregation concerns a shift from the need to gain an overall understanding of the issue to an interest in resolving specific questions or problems which are recognized within the bills as they are presented.

The California legislative staffer who told us of how social research helped in the articulation of staff development legislation in that state also provided us with a vivid description of how this same social research was utilized after the bill was drafted and was passing through the aggregation process in the legislative committees. After the bill had cleared the lower house, she told us,

> As the bill was going through the senate, senate staffers and members who were quite skeptical of school reform--particularly some aspects of the ECE program--would ask a number of questions. We were able to cite the research, and I think that made a critical difference in our ability to convince them that this thing was worth a try.

The effectiveness of this persuasion rested in part on the fact that,

> I don't think the senate staff ever read the Rand report, although we talked about it and shared it with them and everything. They did read the ECE evaluation study, because they had to do that just as a part of their job, but I'm not sure they read it all the way through. I think one or two probably did. But we have done much more reading on school improvement, much more reading of the research, and done much more as far as talking with people in the field about it--through the Staff Development Advisory Committee. So I think we were in an advantaged position because we could say we weren't trying to keep anything from them, we encouraged them to read the report... But they just didn't have the time--or take the time--to read that stuff. So in conversations they would say, "why do you want this?" and we could say, "well the research indicates..." and we could be quite specific as to what the research did indicate. They were sort of at a loss because they weren't able to counter our arguments. It was very helpful.

Just as with the articulation process, it is important to recognize that social science utilization during the aggregation phase makes a social as well as an intellectual contribution to legislature decision-making. The use of social research to convince or persuade others involves the combinations of these two functions. The first component of persuasion, as the quotation above demonstrates, is the critically important social process by which coalitions of support are created. As the staff development legislation described above was being examined and evaluated by the members and key staffers in the California senate, the energetic use of available research findings enabled assembly staffers to neutralize objections and persuade potential opponents to join in support for (or at least not actively oppose) the bill. Thus a strong and ultimately winning coalition of support evolved through discussions of the nature and significance of relevant research findings.

The intellectual component of this persuasion and coalition building process is best described by the term problem solving. The need for intellectual problem solving is most easily recognized in situations where research is not available. An Oregon legislator highlighted the legislator's intellectual dilemma in the absence of clear and persuasive research when he said,

> One of the major things that we are lacking in education is that we don't have the tools to gauge what our end product is. Are we doing the job we should be doing? We know the kids can't read when they are coming out of high school, that they have to take remedial courses once they're in college. Those things we know. Why they're not reading is something else again.

In the midst of this uncertainty, legislation was introduced to force the abandonment of new high school graduation requirements adopted by the Department of Education in this state and intended to make the granting of high school diplomas contingent upon demonstrating minimum levels of competency specified by local school districts. Casual use of inadequate research on this aspect of school performance, however, did not resolve intellectual uncertainties. Rather, it led to comments such as the following:

> The only social science data I saw in that whole debate was when allegations were made that all districts were different. They were able to show a document covering three or four counties in which everybody's proposed graduation requirements were put together and organized by issue area. But we don't have any data on how many kids aren't going to graduate (because that hasn't happened yet). And we don't have any data on the actual variations in district minimum competency requirements. All we have are out-of-context quotations of competencies from one district being shoved up against out-of-context quotations of minimum competencies from another district. I think that makes this more a political issue than it is an educational issue.
>
> (Oregon, Lobbyist)

Consequently, the legislative process simply bogged down and the proposed legislation had to be abandoned. An Arizona State Department staffer with substantial legislative experience summarized this matter of intellectual problem solving nicely when he said,

> What you find is that if you get down to fighting over what the quote "facts" are, the whole issue of policy direction just literally bogs down. Policy agreement is tough under the best of circumstances. If you end up in dog fights over competing information sources which purport to talk about the same topic but are 180 degrees out of phase, you might as well just go home.

It is for this reason that utilization of social research during the aggregation process is both easily recognized and highly controversial. Good research, properly utilized, has a powerful effect on the creation of a supporting coalition for legislation. But bad research, or unethical utilization of research findings can be just as effective in persuading the uninformed or marginally involved legislators. Thus, when a policy maker believes that

> If you already know what the answer is and you want to prove it

> you go find the information source that will support what it is you're after

as one Arizona SDE staffer insisted happens frequently, social science is corrupted rather than utilized. Moreover, because

> There are some areas in which it's a little harder to demonstrate consequences--for example, when there are strong emotional factors involved, and its really a matter that some of the argued consequences are not completely demonstrable, such as in the area of corrections--
>
> (Oregon, Legislator)

it is hard to resist the temptation to cut corners and to pretend that available research is better or more convincing than it really is.

The importance of social research as a tool for persuasion during the aggregation process often leads legislators to be critical of social scientists who offer fuzzy answers to straightforward questions, or who lend support to the "wrong" causes. It also leads them to argue over the validity or relevance of research findings when they are introduced. Because legislative aggregation requires persuasion, equivocal scientific findings which suggest that no specific policy options are completely defensible threaten the aggregation process itself. If scientific evidence offers only criticism and no support, or if the scientists call for more study rather than specific action, the capacity of the legislature to act will be diminished. Thus there is a decided tendency for legislative actors to feel that social researchers are non-cooperative, that they work too slowly, and that they refuse to provide unequivocal policy relevant findings which can be utilized.

Science Utilization During Allocation. Sometimes it is difficult to discern clearly when a decision has moved from the aggregation to the allocation phase in the work flow. Once this shift occurs, however, there is a definite shift in both the social and the intellectual functions of social science. As we suggested in Chapter II, the critical ingredient in the transition from aggregation to allocation is the recognition by key actors that any further modification in a proposed policy would be as likely to endanger the continued support of current sponsors as to win over legislators who are presently undecided or opposed. Once this happens, persuasion is transformed from an open, give-and-take, collaborative process into one which is fundamentally a matter of "wins" and "losses." The mood and temper of this process is captured nicely by the California staffer who told us about staff development legislation in that state. She said, of Assemblyman Hart's first staff development legislation that,

> The teachers' unions were all over that bill. Not in committee, but behind the scenes they were all over the bill. They were in a hard "kill" position whereas with 551, the later staff development bill, they were in a hard "support" position.

An Oregon legislative staffer illustrated the transformation in the use of social science research associated with this movement from the aggregation to the allocation decision-making stage. He cited a timber tax proposal as one example, saying,

> I can think of something like the timber tax issue. You can do all the research, and lay out all the information rather carefully and effectively and it won't have any impact because of the basic politics and the climate of that issue. The industrial concerns on that issue are

> going to count a lot more in the ultimate outcome than any research that's already done or any that you can do. There are always some assumptions that are made in the research and on that kind of an issue industry can come back with their own expert to counter your expert.
>
> We had a really classic case of that in the '75 session when the legislature hired as a consultant a timber tax person. He worked all during the interim with an interim committee to develop a whole system of logic and a tax proposal. They came into the session with a proposal for taxing timber at a certain rate. Timber fought it. They were interested in a severance tax, but not at that rate. They brought in their own experts and it was the legislative expert against the timber expert and, in effect, the legislative expert lost. He lost in more than one way. He lost the tax battle, but he also lost in a career way. The industry in effect just shut him out, saying, "If you don't want to play in our ball park, you just can't play at all."

This staffer was quick to add, however, that

> I think I should go a little further and distinguish between that kind of major issue and some minor issue in the tax law. If, for example, we are dealing with a small change--maybe in how foreign income should be treated in the income tax law--we can easily go in and, if we find there is a problem, do our research on it, demonstrate what the impact of a proposal would be, and have a law put through that will correct it.

That is,

> If there's no big stake involved, the legislators would accept the research. If there wouldn't be a big lobby group coming in and lobbying against our position, the legislation would go through.

These examples serve to remind us that when legislative decision makers are formulating public policy they are creating winners and losers; they are accepting the legitimacy of some interests and neglecting or rejecting others, and once it has become clear that it is impossible to aggregate interests so completely that everyone is satisfied with a proposed policy, a serious and sometimes vicious fight to control final legislative decisions will erupt. When this happens, social research, like any other resource available to the combatants will become a tool or weapon of conflict, utilized (or neglected) only to the extent that it contributes effectively to an ultimate victory.

The timber tax example illustrates clearly both the intellectual and the social functions of social research within these allocative conflicts. The social function of science utilization at this stage is debate winning. Social research findings are helpful--sometimes extremely so--in cajoling, threatening, embarrassing, or intimidating one's opponents and for reinforcing the convictions and the public attractiveness of one's supporters. This is because, in the words of one Oregon legislator,

> In the legislature a factual, rational, demonstration of cause and effect does tend to win arguments. I don't think that the legislature, in those areas in which there can be a clear demonstration of the consequences of a particular action, that those consequences are overlooked.

Embedded in this last statement is a description of the essential intellectual function which is performed by social research at this stage in the decision-making process. Intellectually, social research is compelling when--and only when--it is able to produce a clear linkage between cause and effect. Thus the intellectual function of social science during the allocation debate is one of evidence assessment, sifting claims and counter claims regarding the probable consequences of a particular policy proposal. Whenever legislative decision-making becomes focused on the consequences of a policy, rather than, for example, the political power and social legitimacy of its supporters, social science findings can play a significant part in determining the ultimate outcome of the decision-making process.

While social research findings are frequently ignored in final legislative decisions, the Oregon timber tax debate illustrates an important point which we saw confirmed in a number of other situations. That point is that social research once introduced into the legislative debate must be countered either by the introduction of contradictory research findings, or by competent, careful and persuasive criticism of the validity and/or the reliability of the original research. Despite their tremendous political resources, the timber industry in Oregon would not have been able to defeat legislative tax reform without the development of their own research evidence. Thus, especially at the point of allocation decision-making, the introduction of social research findings into the debate changes the nature of the debate, and forces opponents to base their criticism on comparable research if they are to win.

We don't mean to give the impression that social research is generally available or that it is regularly utilized in legislative debate. Now, as in the past, most legislative decisions are taken on the basis of raw political power, or on the basis of authority related to public values, legal precedents, or personal influences. As one of our respondents put it, however,

> we're making some decisions based on research now, and I think it's very helpful.
>
> (California, Executive)

What we do find in our data, then, is a substantial respect for social research, a recognition that it plays a critical role in determining the final outcomes of some legislative decision-making, and a sense that it would be more widely utilized if it were more readily available and more adequately interpreted in relationship to policy questions being debated.

Social Research Utilization During the Oversight Phase. When it comes to the oversight of existing policies, social research and evaluation findings play a vital, but somewhat disturbing role. Under close scrutiny, our interview tapes reveal that those legislative actors who are concerned with questions of legislative oversight quite often equate adequate performance of this task with intensive utilization of social science research and evaluation data. A California legislator captured the essence of the typical oversight orientation when he said, of the Early Childhood Education program in that state, that,

> In order to ultimately gain public credibility we needed to approach this thing to some degree as scientists. We needed to say that we are scientists about our business and that what we want to do is fund a limited number of schools under the Early Childhood Education program. Schools that are broadly representative--urban, rural, suburban, etc.--and then critically bring in outside evaluators, from the beginning, so that all of the criteria on which the evaluations would be agreed upon before we started. Private outside evaluators and inside people and the immediate participants all were in agreement. We had to start with a program of limited scope, to encourage experimentation, and to put enough money in to do a variety of things really well.

Unfortunately, in this legislator's view,

> What happened was that it was determined politically that it was important to see how quickly we could bring all the

> schools in California under the ECE umbrella. So that instead of experimenting with a small group until we had success models that we could point to with pride and say, "This seems to work in a rural setting--let's move cautiously now toward replication." We just expanded the program willy-nilly all over the state.

There were, of course,

> Isolated scenes that were reporting some kinds of dramatic breakthroughs, but when examined more closely the research criteria were found to be suspect. ...So my major reservation is that...the legislature and the governor succumbed to the next wave of new money and they have continued to do their decision-making on the basis of inappropriate or too little data, and therein lies our major problem.

A similar perspective on the purpose and nature of legislative oversight was expressed by an Oregon legislator interested in vocational education who told us,

> The thing I've been hollering about all along--and I'm a very strong supporter of vocational education--is that we just don't know whether or not those students going through vocational education programs are really using what they're learning...are they going into the particular jobs that they spent their time in voc. ed. classes preparing for? And are they gaining financially or socially because of what they learned back there in those voc. ed. classes? We're spending a lot of money on voc. ed -- are we getting our money's worth?...Is the program helping? We just don't have any idea in the state of Oregon what successes we're having with current voc. ed. programs. So out of this study we're doing right now--through these special hearings--one thing that I'm going to push for is that we get on the ball and start tracking these young people to find out if, in fact, they are putting all this vocational education to some good use, and see if it's helping them to be successful.

As these two examples suggest, the major intellectual contribution made by social science to the process of legislative oversight is one of performance evaluation. Legislative actors interested in oversight were typically concerned with the need to develop far more sophisticated and carefully documented evaluation studies which would provide clear and unequivocal answers to questions about whether or not a particular program is "working." "Working," as recognized by the California ECE supporter, is a concept that requires criteria against which to evaluate the results of a program, and such criteria are not only hard to specify clearly, they are frequently overrun by political pressures or made obsolete by the emergence of new goals which are given precedence. Nevertheless, we found vigorous and fairly widespread support among our respondents for direct and explicit evaluation of a broad range of existing governmental programs.

The two examples quoted above illuminate the social as well as the intellectual contributions made by research and evaluation findings during the oversight phase of legislative decision-making. Note that both of the legislators quoted are seeking the use of social research as a tool for questioning or criticizing the effectiveness of a policy. That is, during the oversight process, social science utilization tends to become a vehicle for the mobilization of criticism. Legislative actors who are entirely pleased with a program almost never express an interest in systematic evaluation. And if they do look forward to such an evaluation it is because they are critical of program administrators and hope to show that they have been lax in capitalizing on some important new development. In almost every instance research tends to be viewed as providing conclusive evidence when it leads to negative judgments about a program. More positive evaluations are seen as interesting but not crucially important.

Our respondents seemed to be saying that if a legislative program was adopted and an evaluation showed "no significant differences" for its target populations then it was clearly a bad program, while a program which was accompanied by positive gains might only appear successful due to the presence of other factors which were perhaps leading to the improved conditions. Thus, a high interest in formal, scientifically sophisticated program evaluations is almost invariably accompanied--at least among our respondents--by a belief that the program under study is probably not very good.

To summarize. The foregoing analysis can be summarized as four major findings regarding the utilization of social science within the legislative decision-making process. These are:

> Utilization Finding #1: Social science represents one of four distinct types of expert authority utilized to guide legislators in their decision-making activities. The other types of expertise (legal, political and technical) each serve as important sources of influence. Social science expertise however, is more widely used than generally appreciated, is the special interest of newer professional staff members, and is more important for legislators who think of their policy-making responsibilities as a full-time occupation.
>
> Utilization Finding #2: Legislators and other key actors within the legislative policy system differ greatly in both their inclination and their capacity to utilize social research and evaluation findings as a basis for decision-making. The differences in inclination are largely dependent upon how each decision maker orients to his/her work role. Within each work role group there are basic orientational choices which must be made. Choosing certain options leads to an appreciation of the relevance of social research, while choosing other options leads legislative policy makers to rely more heavily on the non-expert authority modes and/or on non-scientific forms of expertise.

Utilization Finding #3: When social science utilization takes place it serves both intellectual and social functions. Intellectually, social science contributes to decisions by showing its utilizers how to conceptualize and interpret cause and effect relationships within the policy world and thus promises to reveal how they can choose the most reliable and effective policy options from among the possible courses of action available. Socially, science utilization affects the development of support groups or coalitions and controls access to debate over the potential value or actual performance of specific legislative policies under consideration.

Utilization Finding #4: Social science utilization serves different purposes and has different effects on each of the four major stages within the legislative decision-making workflow. Both the social and the intellectual functions of social research utilization are related to the stage at which a policy decision is located. The major contributions of social research to each of the four decision-making stages are summarized in Figure X. These functions are: 1) in Articulation, utilization serves the intellectual function of interest and/or issue conceptualization while affecting the social development of interest group solidarity. 2) In Aggregation, utilization assists with the intellectual tasks of policy problem solving while assisting with the social process of coalition building among support or opponent groups. 3) During Allocation, utilization performs the intellectual task of evidence assessment while serving the social purpose of controlling access to and winning policy debates. And 4) During the Oversight phase, science utilization fills the intellectual need for policy performance evaluation while serving the social function of mobilizing criticism of existing policy and building pressures for reform.

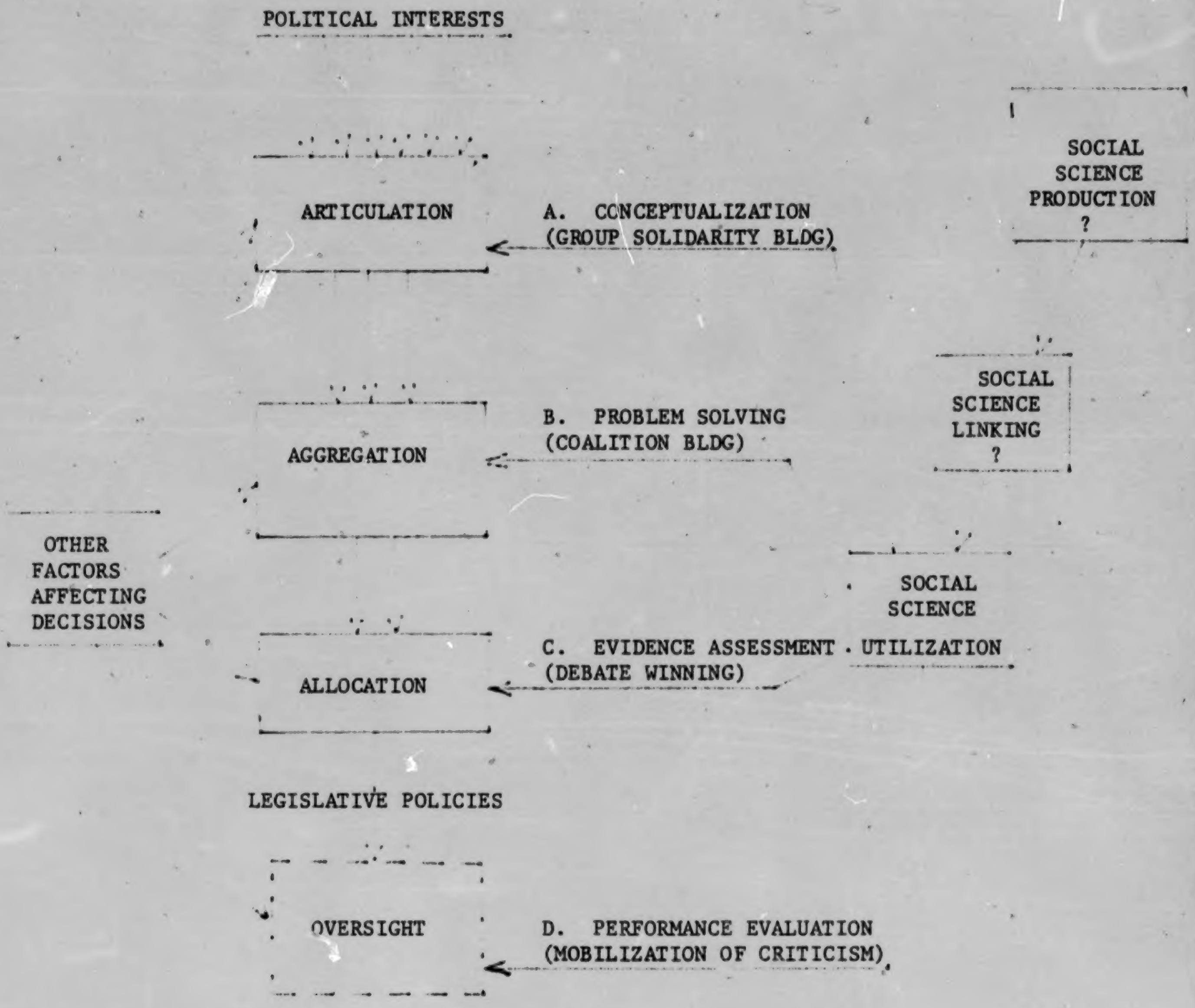
As indicated in Figure X, beyond the inclinations or capacities of individual actors, there are two main limitations on the potential for science utilization in making any particular decision. First are a wide variety of non-utilization factors constantly operative within the legislature which are alluded to by the box labeled "Other Factors Affecting Decisions" in the figure. As we have repeatedly indicated, these "other factors" are very powerful and can frequently override the social research findings regardless of their adequacy, availability, or effective utilization by key actors inclined and able to utilize them effectively.

The second factor limiting utilization of science (also suggested by the design in Figure X) is the problematic nature of the linkage between social science production and the points of legislative utilization. Although our research has not addressed directly the question of whether appropriate social research has been undertaken in relation to critical educational policy problems, it is clear that much remains unknown about how schools function and how children learn. It is unreasonable to expect extensive utilization of social research which is incomplete, contradictory, methodologically weak, or equivocal in its findings. If adequate research is not being produced it can hardly be utilized.

Inadequate production is frequently compounded by the existence of serious, and frequently insurmountable problems within the systems supposedly responsible for linking the production of research findings with the points at which utilization might take place. On the whole, we were impressed by the quality and energy with which legislative staff members are currently pursuing social research in order to link it to legislative decisions. They report great difficulties in performing this linking function, however. They do not always know where research is being produced. They find that there is not enough time to elaborately re-interpret esoteric research findings which might be relevant but are not adequately framed for

Figure X

THE INTELLECTUAL AND (SOCIAL) FUNCTIONS OF SOCIAL SCIENCE UTILIZATION WITHIN THE LEGISLATIVE POLICY WORKFLOW


POLITICAL INTERESTS
SOCIAL SCIENCE PRODUCTION ?
ARTICULATION
A. CONCEPTUALIZATION (GROUP SOLIDARITY BLDG)
SOCIAL SCIENCE LINKING ?
AGGREGATION
B. PROBLEM SOLVING (COALITION BLDG)
OTHER FACTORS AFFECTING DECISIONS
SOCIAL SCIENCE UTILIZATION
ALLOCATION
C. EVIDENCE ASSESSMENT (DEBATE WINNING)
LEGISLATIVE POLICIES
OVERSIGHT
D. PERFORMANCE EVALUATION (MOBILIZATION OF CRITICISM)

their use. And they find that the researchers to whom they turn for help are too often unable to identify with the problems of interpreting their research findings within a pragmatic political context where values, legal precedents, and interpersonal influences represent equally powerful constraints on the decisions which are being made. Moreover, legislative staffers often find that social researchers do not adequately appreciate the problem of timing in the legislative workflow. Scientists tend to want to wait until their conclusions are completely reliable while legislative actors must make decisions based on very unreliable data most of the time and are therefore grateful for research findings if they can significantly reduce uncertainty even if they cannot eliminate it entirely. Finally, when they do become active in the policy arena, researchers are tempted to turn policy-making into social experimentation on a grand scale--seeking to have policies constructed so that their effects can be studied. Policy makers, however, live in a world with little toleration for experiments. Whether it is the fallout from nuclear testing or the invasion of privacy resulting from social research, the political costs of experiments which go awry are fearsomely high for a political leader. In fact, even if the social experiments are completely successful those who did not benefit are likely to generate intense political criticism because political leaders have allowed significant inequities in the benefits from those experimental policies to develop.

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

The findings presented in the previous chapter support several conclusions regarding the behavior of key legislative actors and the processes of legislative decision-making. They also have important implications for 1) the refinement of state legislative structures and operations, 2) the improvement of social science utilization within the legislative decision-making process, and 3) the development of new directions in state legislative research. In this concluding chapter we will identify the most important conclusions and recommendations implicit in our research findings and discuss briefly their potential contributions to knowledge and action. In order to keep this chapter both brief and useful to participants in the legislative process as well as political scientists and social science research sponsors, our conclusions and recommendations will be presented as directly and succinctly as possible. Although there is some danger of oversimplifying complex issues, our purpose is to highlight the most useful contributions to knowledge and action which result from this research.

A. CONCLUSIONS REGARDING LEGISLATIVE DECISION-MAKING

Five major conclusions regarding various aspects of state legislative decision-making are strongly supported by the analysis of our data. The first of these conclusions reinforces our conviction that any interpretation of legislative policy formation must identify and take account of the orientations and actions of a relatively small group of key actors who are intensely involved in any specific decision. That is,

> Conclusion #1: This research underscores the importance of the behavioral approach to legislative research by identifying

the major components of a legislative decision-making orientation, by demonstrating that these endogenous orientation variables are measurable, and by revealing the relationships between orientations and the involvement of legislative actors in specific work roles and their responses to events in the legislative workflow.

As we indicated in Chapter I, this study began with a role-orientation theoretical perspective and then undertook to examine how legislative decision-making is affected by variations in the beliefs, attitudes, goals and expectations held by key actors as they interact within the legislature. We indicated at that time that our decision to base the design of this study on role-orientation theory was not intended to imply that institutional or process theories are either mistaken or inappropriate, but only that--despite their popularity in recent research--they did not appear to be promising as vehicles for investigative social science utilization within the legislature. Now that our data have been examined, and the extensive impact of several basic orientation factors fully documented, it is possible to see that the behavioral perspective which undergirds our role-orientation framework is of crucial significance.

Broadly speaking, behavioral research--particularly the version emphasizing decision orientations used for this study--differs from institutional and process research designs in its emphasis on the importance of endogenous variables (i.e., ones operating within individual actors) as contrasted with the study of exogenous variables (i.e., ones operating on individual actors or the legislature as a whole) which are the focus of attention in the other two theories. Our findings show that endogenous factors expressed as orientations toward the legislative decision-making process are independent of environmental or institutional factors which operate externally to constrain everyone's behavior. Not only did we find that an individual's orientations are virtually unrelated to prior experience or background, while being closely related to each respondent's legislative work role, we also discovered that these orientations are affected by specific role-taking choices made as an individual decides how best to fulfill his/her work role responsibilities. Moreover, our findings suggest that decision orientations interact with exogenous factors such as constituent pressures, expressed legislative leadership priorities, or social science findings so as to control the effects of these variables. That is, we found that--at least in the case of social science utilization--an individual's sensitivity to the presence of important exogenous factors depends greatly on his/her prior responses to the major orientation factors which control the linkage between the individual and the legislative workflow. Thus, role-orientation is an authentic intervening variable not merely a surrogate or "short hand" variable which serves to conveniently summarize the effects of exogenous factors which are somehow more "basic." To the contrary, we found that orientation choices were the most effective means available for predicting how individual legislative actors should perceive and respond to the issues which they confront. We conclude that there are theoretical not just practical limitations on how far one can expect to go in explaining legislative outcomes on the basis of institutional and socio-economic or political variables. We are not, of course suggesting that exogenous variables have no effect on legislative outcomes. We are only insisting that their impact is both targeted and ameliorated by the effect of endogenous variables available only to the behaviorally oriented researcher. Thus we are suggesting that future research on legislative decision-making should combine behavioral with process and/or institutional designs in order to discriminate between endogenous and exogenous variables and to analyze the magnitude of effects of each type of influence.

> Conclusion #2: This research highlights the impact of work-role responsibilities on individual orientations toward the legislative decision-making process and identifies critical role-taking choices which further strengthen the relationship between work-role behavior and orientations.

Within the general strand of legislative analysis which we have labeled "role-orientation" research, our findings clarify and elaborate the dramatic impact of decision makers' work roles on their orientations toward the decision-making process. Not only do our findings document important differences between legislators and non-legislators, but they also describe differences in orientation among the various sub-groups within each of these larger clusters of legislative policy makers. We have further noted that differences in orientation within each work-role sub-group are related to basic choices made regarding work responsibilities. Thus, for example, we found that legislative actors tend to choose between focusing their attention on the content of legislative proposals or on the process of legislative action. Those who focus on issue content adopt a different work style and respond to different influences than those who see their work in terms of the process of making legislative decisions.

We also found that some policy makers emphasize their responsibility for initiating policy while others choose to emphasize responding to the pressures and initiatives of others. The initiators emphasize the importance of politicking, coalition or consensus building and finding the resources to influence others. Those who see their roles more in terms of responding to pressures emphasize the need to analyze, solve problems, and assess the performance of existing programs or the need to defend themselves against the undue influence of policy initiators. These differences in approach to legislative work-role responsibilities (along with others described in Chapter V) contribute significantly to the control of individual policy makers' activities and attitudes.

> Conclusion #3: This research documents the existence of four distinctive stages within the legislative workflow, and highlights essential changes in the nature of legislative policy decisions and in the actors influencing these decisions as issues move from one stage to the next.

We found that the first stage in the formulation of legislative policy is characterized by the articulation of interests and issues. During this articulation stage, the essential element in a legislative decision is the definition of the policy problem to be solved. Those factors which contribute to the development of a consensus on problem definition have the strongest influence on policy making at this point. Analysis, based on values and expert knowledge, tends to be more important than bargaining at this stage. Legislative actors with a 'strong' view of their representative role tend to see the articulation process as controlled by mechanisms within the legislature, but responsive to broad public interests, while 'weak' representatives see articulation as appropriately the business of outside interest groups who present their demands in ways which take account of the limited capacity of the legislature to respond to any particular definition of the public interest.

The second stage in the legislative decision workflow is that of aggregation. Aggregation refers both to the drawing together of similar proposals and the creation of strong support coalitions of shared interests. The essential nature of a legislative decision at this stage is the identification and evaluation of optional solutions to the problems defined during articulation. Aggregation begins as soon as a problem is clearly defined and at least one legislative solution proposed. It is the most important function of legislative policy committees, and therefore typically takes place between the time bills are authored and the time they either die or are referred out of committee. Aggregation can, however, be undertaken even before a bill is drafted. In fact, nearly all complex legislative proposals go through extensive aggregation before they are introduced.

While analysis is important in supporting aggregation, this stage frequently involves extensive bargaining among interest groups and key legislative actors seeking to create a compromise between their own and other interests which have been able to secure a place on the legislative agenda. Consequently, skills in legal analysis and interpersonal influence through persuasion are vitally important in creating and controlling these bargains. Aggregation ends as soon as the key actors perceive that further efforts to modify a proposal would be more likely to weaken existing commitments of support than gain new ones. Once this happens a bill is recognized as being in its final form and the process moves on to stage three.

The third legislative stage is allocation. In this stage the essential element in a legislative decision is the setting of policy priorities. That is, once proposals have reached their final form, the legislature must decide whether they have enough legitimacy and political support to merit needed resources and/or attention. The creation of a consensus on policy priorities is recognized as the pre-eminent concern of the legislative fiscal committees. This recognition reflects the fact that the fiscal committees have to determine whether or not financial resources will be made available to implement legislative policies. As we will discuss more fully below, we believe that the pre-eminence of the fiscal committees in the allocation process is somewhat unfortunate. On the one hand, it creates the illusion that only the financial resources available to the legislature are so limited as to force tough priority setting decisions. In our view there are other resources which are equally limited but not adequately appreciated under typical legislative decision procedures. And on the other hand, reliance on the fiscal committees for nearly all priority setting allocation decisions has weakened the capacity of these committees to adequately deal with the aggregation phase of finance and budgeting reform issues which tend to be treated as if they were entirely allocative in nature. This point will become clearer in the discussion of our recommendations for changes in legislative operations below.

Allocation decisions are intensely partisan in nature. They result in clear "winners" and "losers" and thus have consequences for the perceived legitimacy of the legislature as a whole as well as for its individual members. Thus allocation decisions tend to be conservative, influenced strongly by established and vested interest groups, and closely monitored by the legislative leadership. Bargaining tends to dominate analysis in the allocation process as expertise is utilized more to embarrass or intimidate than to inform and persuade. Values are constantly being re-affirmed in the allocation stage and decisions are seen as depending to a significant extent on whether proposed decisions fit established values.

The fourth and final stage in the legislative workflow identified in our research is that of oversight. Oversight of legislative policy, which we found to be more a matter of personal than institutional commitment, sees decisions in terms of evaluating the performance of policies or agencies. This stage, which is frequently neglected entirely, is the primary interest of a relatively small number of legislators and staff members. Those interested in oversight tend to be critical of current policy, and tend to rely, more than other legislative actors, on expert analyses of data. Our findings clearly indicate that effective legislative oversight is possible only with the development of a substantial cadre of professional staff members and the emergence of legislators who think of their policy-making responsibilities as a full-time occupation. We also discovered that the emergence of significant interest in legislative oversight tends to create substantial tension between the legislature and the executive agencies responsible for implementing the policies. In fact, from the perspective of legislators or staffers with an interest in oversight the executive agencies tend to be seen as "just one more interest group" with biases and limited interests rather than as the operational arm of the legislature responsible for comprehensive policy implementation.

> Conclusion #4: This research has examined the distinctive contribution of four different modes of authority based influence

on legislative policy, and enables these authority influences to be clearly distinguished from and contrasted with the constraints resulting from the application of various power resources.

Our study makes a particularly important contribution to interpreting political behavior by distinguishing between authority and power based influences on decisions and by distinguishing among four different modes of social authority. While we recognize the existence of political power based on money (especially campaign contributions), voter influence (expressed in large or well disciplined interest groups), and mass media access (embodied in interest group prestige or sensationalist public relations tactics), we discovered that it is possible to both describe and measure legislative influences which spring from a capacity to persuade legislators to identify with and accept policy proposals on their merits rather than by manipulating these power resources. We found that the direct use of power resources, though important, is relatively infrequent. Most legislative decisions are made on the basis of authority rather than power based relationships. That is, typical interactions among legislative decision-makers are characterized primarily by the offering and accepting of legitimate "grounds for decision" rather than by the threat or actual use of powers to reward or punish. As a result, most legislative decisions are characterized by spontaneous and voluntary acceptance of the intrinsic merits of proposed policies (or resistance based on a rejection of the merits). We were able to generate measurable distinctions between reliance on appeals to: 1) values or political ideologies, 2) legal norms or precedents, 3) expert knowledge and analysis, and 4) interpersonal attraction and friendship. We were even able to recognize distinctive sub-classes of influential expertise, namely: legal, political, technical and scientific expertise. Our findings clearly indicate that authoritative appeal to a system of values is the most important source of legislative authority. Following value based authority we found that expertise, legality, and friendship are viewed as successively less potent influences among legislative policy makers.

Our research was not directed specifically at questions concerning the interaction between authority and power based types of influence. Thus we are unable to draw solid conclusions regarding when or why power resources are utilized or what trade-offs exist between these different bases for influence. Future research should seek to discover the extent to which authority resources are able to resist power-oriented influence efforts.

> Conclusion #5: This research suggests that the concept of legislative decision-making should be distinguished from the concept of legislative judgment-formation, and indicates that--on most issues--the more aggressive and demanding task of decision-making is undertaken by only a very small group of key actors, while the bulk of the legislature is content to render judgments about the adequacy of the decision-makers' work rather than the merits of the specific decisions which they have made.

We found that an overwhelming number of legislative decisions were made by a tiny handful of people. At the articulation stage when the content of legislative proposals is being defined, it is rare to find more than a dozen or so individuals with more than a casual understanding of the decisions. Not infrequently, in fact, fairly substantial policy decisions will involve only two or three individuals. Although decisions are generally (but not always) exposed to a fairly large group of policy makers as they pass through the four stages in the legislative workflow, the great bulk of those involved adopt an essentially passive stance of one rendering judgment on the legitimacy or adequacy of others rather than an active stance of one engaged in dissecting an issue, gathering and weighing evidence on its merits, or studying its probable impact on society. While the responsibility for judgment is taken seriously and most legislators conscientiously try to evaluate the issues as they arise, the judgment stance *assumes* that relevant information has been gathered and adequate analysis undertaken by others so that appropriate decisions will automatically result from close attention to the information one is given. It is as if most legislators are acting as the jury rather than the prosecutor in the trial of an issue. The jury, on principle, assumes that the prosecutor and defense attorneys have done their job. Too frequently, however, many interested parties have no adequate representative and the jury is left to decide on the basis of a biased and incomplete presentation of the evidence.

While such a situation, given the work load of the legislature, is probably inevitable, it does highlight the importance of the tiny group of active decision-makers working on any given issue. It is they who must become the target of new information or analysis if one hopes to effectively influence the course of a decision.

B. RECOMMENDATIONS FOR IMPROVING LEGISLATURE OPERATIONS

The overall conclusions discussed above, together with the more specific findings presented in Chapter V, focus attention on two important weaknesses in the typical structure and operations of state legislatures. First, our research indicates that, in many cases, there are crucial weaknesses in the flow of legislative issues from one decision-making stage to the next. Secondly, the research identifies serious problems in the integration of decision-making resources resulting from the emergence of highly specialized staff and legislator roles. In response to these common weaknesses we offer the following two broad recommendations for the improvement of legislative operations.

> Legislative Improvement Recommendation #1: Legislative decision-making performance would be significantly improved if the procedures currently utilized in the consideration of budget allocations were applied to the allocation of other legislative resources (especially new rules and new program ideas). Similarly, legislative budget allocation decisions would be made more easily and more effectively if they were given the same level of articulation and aggregation attention currently being given to changes in agency regulations or program definitions. Toward that end, we recommend that state legislatures reorganize the division of labor which now distinguishes the work of policy and fiscal committees. Specifically, we recommend: 1) that all Education Policy Committees establish legislative policy review cycles of 3 to 5 years in length for all major legislative programs and 2) that legislatures create appropriate Regulation on Program Review Committees charged with the responsibility for insuring that new program directions and new agency rules and regulations--like budget allocations--are kept within manageable limits.

We noted in our study of the flow of legislative decisions through the legislature that the process works best when issues pass through both policy committee hearings and fiscal committee review. When new legislative programs are being created which require both new agency regulations and new budget resources to support the program legislative policy makers invariably look at the program twice. The first time, in the Policy Committees, aggregation type questions are generally asked: Is the proposal sound? Is it acceptable to all vitally interested parties? Does it seem more promising than alternative approaches? Is it compatible with other laws and other programs? At the second hearing, before the fiscal committees allocation type questions are raised: Is the program important enough to justify the use of scarce resources to implement it? Is it likely to be cost effective? Can those responsible for implementation be expected to understand and comply with its intent?

While this separation between aggregation and allocation types of decisions appears particularly appropriate for insuring the best possible policy outcomes, it is not applied to a great many decisions. Still worse, allocation decisions within finance committees focus much too narrowly on fiscal resources, as if dollars were the only scarce resource in need of careful stewardship. Especially in the post-Proposition 13 era of governmental expenditure limits, it is important to recognize that a legislature can only afford to make a limited number of regulatory changes and a limited number of changes in overall program direction if the agencies responsible for implementing those policies are to be expected to respond to legislative mandates appropriately. We believe that legislatures should look upon their powers to regulate behavior and to define governmental service programs as limited every bit as much as their powers to spend tax dollars. When educators (or any other government workers) are burdened with diffuse contradictory expectations or hampered by incoherent or conflicting regulations the likelihood that waste will result is just as high as when there are no mechanisms for fiscal accountability or review. If Regulation and Program Review committees were created with the responsibility for limiting the number of new regulations or new program directions in the way finance committees now limit dollar allocations legislative policy would, we believe, be significantly improved.

We also noted that legislatures repeatedly find it particularly difficult to reform basic finance policies or to adequately review the legitimacy and viability of ongoing budget allocations. It is not that legislatures do not recognize these difficulties. Indeed, the development of so-called "Sunset laws" and of "Zero-Based Budgeting" have been motivated by a sense of urgency among many legislative actors regarding this problem. In our view, the crux of the problem is the failure to separate the aggregation from the allocation processes in dealing with finance policy changes. Typically the burdens of both finance reform and established program review are carried entirely by legislative fiscal committees rather than by the policy committees. This leads to a confusion of allocation questions regarding priority with aggregation questions regarding the adequacy of alternative policy solutions. The establishment of budget review cycles for established programs within Education (and other) policy committees would go far torward bringing the question of alternative solutions into focus and separating that question from the priority for action question which faces the fiscal committees. This process, especially if it included cyclic review of finance policy itself would, we believe, contribute greatly to the capacity of the legislature to deal with fiscal reform without having to await court mandates or citizen referenda.

The establishment of regular policy review cycles would also strengthen the linkage between growing concerns with legislative *oversight* and the re-articulation or re-formulation of policy problems and re-assessment of programs. Rather than basing oversight concerns on the failures of current policy and forcing concerned legislators to operate from a stance of constant criticism, the development of regular review cycles would stimulate supporters as well as opponents to examine more closely the propriety and effectiveness of current policy and thus would lead to a more balanced debate on the merits of continued support for current programs.

Our second recommendation for change in typical state legislative decision-making operations springs from the recognition that the emergence of substantial professional support staff groups within the legislature have brought unique problems as well as expanded opportunities into the legislative policy making process. In our judgment:

> *Legislative Operations Recommendation #2*: The integration of staff expertise into the policy decision-making process would be improved if three actions were taken: 1) if staff responsibilities for issue analysis were related to the major policy review cycles recommended above in such a way that, *in advance* of a particular legislative program review, staff were asked to undertake a systematic search for new concepts and new evidence regarding the adequacy or the effectiveness of the programs and policies coming up for review, 2) if a regular program of

legislative staff development were undertaken in order to expand staff awareness of recent developments in an issue area and to upgrade staff skills in retrieving, interpreting, and critically evaluating pertinent policy information, and 3) if the legislature would expand opportunities for the temporary involvement of senior practitioners and scholars with legislative staff consultants in the conceptual analsis of issues, articulation of legislation, and assessment of evidence related to proposed policies.

These recommended actions would address three problems in staff utilization which we observed. First, we found that expectations regarding staff expertise have been rising faster than their training and experience can adequately support. Particularly, in Arizona and Oregon, we found that, with a few notable acceptions, legislative staffers were expected to have substantially higher capacities for retrieving and analyzing large bodies of information on many complex issues than is reasonable given their backgrounds. In California, we found a larger number of highly competent staffers, but found that the pace of legislative action and the diversity of issues being worked on at any given moment made it difficult for even the most sophisticated staffers to keep up with their work loads. Pacing major legislative reviews would not only help to focus staff efforts, but would provide the rationale for deferring consideration of complex new proposals until the appropriate program is up for review. Finally, we noted that there is a decided tendency for legislative staffers to emphasize the technical evaluation of "hard data" and therefore to turn human and political problems into technical and programatic ones. This tendency, while very helpful in challenging traditionally fuzzy policies and programs needs to be balanced by providing staff members with the more intuitive and seasoned judgments of senior practitioners and scholars who have lived with and studied policy problems over an extended period of time. Thus we feel that bringing senior scholars and practitioners into close but temporary contact with legislative staff members would provide a better base for formulating the expert judgments so important to the policy decision-making process.

C. RECOMMENDATIONS FOR IMPROVING SOCIAL SCIENCE UTILIZATION

This research has a number of important implications for the improvement of social science utilization by state legislatures. Perhaps the most important change needed is a revision in the way social science is understood by policy-makers, staff members research and evaluation sponsoring agencies and even the social scientists, themselves. We found that expectations among key legislative actors regarding the nature and potential contributions of social science to legislative decisions are often at odds with social scientists' own conceptions of their work or its potential utility. Thus we recommend that,

> Social Science Utilization Recommendation #1: Sponsors, disseminators, and interpreters of social science should self-consciously discriminate between policy research and evaluation (intended for immediate legislative utilization) and social research and evaluation (intended to serve as the basis for expanded knowledge about social behavior). This discrimination should be accompanied by the formation of specific standards for conducting, reporting, and interpreting each type of social science activity.

One of the primary sources of tension and misunderstanding in the working relationships between social scientists and public policy makers is the failure of both to recognize that policy research differs in its methods and procedures as well as in its motives and purposes from other types of social research. The social science community has had to struggle diligently to free itself from political biases and to establish standards of professional conduct as well as of scientific explanation which are impervious to the partisanship of political interests. One result of this effort has been to insist that the objective of social research is explanation rather than action. That is, social scientists try, on principle, to avoid claims about the political significance of their work and focus instead on its theoretical importance for understanding the causes of all social behavior. One indication of how successful social scientists have been in this effort is the frequency with which they are charged with "irrelevance," "impracticality" or insensitivity to "pressing social problems." However, as we indicated in Chapter I (and documented in some detail in our earlier report--see Mitchell, et al., 1977a) the criticism that social science [illegible] irrelevant and insensitive to public policy needs has spawned a fundamental change in the character of governmental sponsorship and funding for research.

In recent years, support for social science has shifted sharply away from the traditional concern for better general knowledge and explanation and toward support for public policy problem solving. This shift in direction has not only meant that social scientists are often studying different problems than they would otherwise have pursued, it has also meant that their research has tended to focus on the study of variables which are "manageable" rather than those which are "explanatory." As a result, social science findings have often become highly controversial--with important and sometimes highly vitrolic arguments centering on whether or not the research work has assessed the "right" variables or adequately considered "alternative" approaches to the problems under study.

In the last few years it has become clear that asking social scientists to devote their energies to solving public policy problems frequently embroils them in political controversies which they are ill-prepared to handle. Moreover, we found in our research that social science cast in the traditionally non-political mold can be highly useful to policy-makers even though it is somewhat harder for them to locate, interpret, or apply effectively. After extended contact with a wide range of legislative policy-makers, we began to recognize that one major stumbling block preventing adequate utilization is the failure of both social scientists and legislative policy makers to fully appreciate the difference between research intended for immediate practical use in shaping public policy (let's call this Policy Research) and research which is intended to serve the more abstract but also more fundamental purpose of explaining how society works (let's call this Social Research). Scientists seem to expect policy makers to be interested in their theories of social behavior while policy makers seem to believe that everyone is (or at least should be) interested in the resolution of immediate issues. Thus each group is both impatient and rather critical of the other with little appreciation of the long term value of separating research and policy making activities in our society. Much of this criticism and impatience could be eliminated, however, if the policy support and knowledge production functions of research were conceptually distinguished, and if research sponsoring agencies would develop distinctive standards for conducting, reporting, and interpreting each kind of research. In the long run, the findings of Social Research studies need to be politicized while the findings from Policy Research need to be criticized. That is, Social Research, conducted for the purpose of expanding our knowledge of social behavior, needs to be evaluated and interpreted by scientists with policy analysis skills, while Policy Research findings need to be critically examined to insure that partisan biases have not blinded researchers to basic variables affecting the problems they are trying to study.

This leads to our second suggestion for improving social science utilization:

> Social Science Utilization Recommendation #2: State legislatures should develop procedures for systematically monitoring Social Research findings to assess their implications for current policy decisions. At the same time, legislatures should establish procedures for effectively criticizing the partisan biases implicit in the conclusions proffered by Policy Researchers. To pursue these goals we recommend:
>
> (1) that legislatures provide their staff with the authority and resources necessary to hold Scientific Advocacy Hearings on major issues in order to bring critical and scientifically sophisticated analysis to bear on the policy implications of new research,
>
> (2) that legislatures initiate the practice of inviting a social scientist to serve as a Legislature Hearing Analyst to examine and interpret the social science foundations and implications of public testimony on major legislative issues.
>
> (3) that the legislature undertake to routinely sponsor critical re-analyses of the data and implications for policy of major new Policy Research and evaluation studies.
>
> (4) that the legislature identify important research questions and topics appropriate to issues likely to become

critical within a policy review cycle (see legislative Procedure Recommendation #1), and that sponsorship of research on these topics be undertaken at least 12 to 18 months prior to the start of the legislative review process,

(5) that legislatures make substantial efforts to coordinate their policy review needs with the formulation of sponsored research programs by major social research funding agencies, and

(6) that legislatures expand and protect sponsorship for Social Research on major public policy issues as well as promising lines of social theory development without expecting immediate policy pay-offs from those research findings.

The primary thrust of these six recommended actions is to strengthen the working relationship between social scientists and legislative policy makers. In our view, the creation of advocacy hearings in which social scientists with divergent and competing interpretations of policy issues are asked to debate the relevance of current research for specific policy options would both strengthen the quality of scientific analysis brought to bear on a topic and expose the biases or weaknesses in existing research. Permitting legislative staff to conduct these advocacy hearings would not only remove them somewhat from the glare of public attention which tends to follow full legislative hearings but would also put scientific expertise to work at the staff level--below the level at which important considerations of political interest and values tend to deflect or obscure questions appropriately answered by scientific expertise. Of course, individual legislators would want to attend some hearings and to study for themselves the research findings being presented. Assigning responsibility for the hearings to staff members, however, would free legislators from the need to respond politically to the information being generated.

The creation of Legislative Hearing Analysts would in our judgment, go far in helping the legislature to understand when and how scientific insight is related to political interests. It would also assist social scientists in understanding the kind of questions which legislators must answer in order to resolve public policy problems.

> *Social Science Utilization Recommendation #3*: State Legislatures should take steps to guarantee democratic *access* to social science findings by all interested individuals and groups. Because utilization of social science findings in the course of legislative analysis and debate tends to control *who* can participate in the policy-making process, it is vitally important for the legislature to support democratic policy-making by insuring that *all* legitimate interest groups are able to analyze and interpret their interests from a social science perspective. Perhaps the best way to achieve this goal would be to take steps to encourage public and private university scholars to devote a significant portion of their time and energy to providing analysis and advocacy services to political interest groups.

> *Social Science Utilization Recommendation #4*: State legislatures and social scientists should recognize the importance of *timing* in the relationship between social science and legislative policy formation. Scientists should recognize the need for rapid action within the legislature and the value of *reducing* uncertainty even when it cannot be eliminated entirely. Legislators should recognize that there are generally much longer cycles of work effort required for adequate scientific investigation of a problem. Both should recognize the fact that the *form* in which social science findings are needed shifts as legislative decisions move from one stage to the next and should, therefore, distinguish between the utilization of science to a) define problems, b) evaluate alternative solutions, c) assess evidence, and/or d) describe and evaluate program or policy performances.

Finally, our research indicates that,

> *Social Science Utilization Recommendation #5*: Universities should undertake the development of training programs for legislative staff consultants, interested citizens, and public service professionals in order to upgrade their capabilities for locating and interpreting social science findings relevant to public policy issues.

In the immediate future, conferences and in-service training sessions for current staffers and other interested persons would significantly assist in improving social science utilization. Over the long haul, however, it is evident that the interpretation of social science is every bit as complex and professional a task as is its creation.

D. FUTURE DIRECTIONS IN LEGISLATIVE RESEARCH

Our research suggests a number of possible new directions for the study of state legislative policy-making. Certainly the most important step in the immediate future is to undertake a series of research studies which combine the behavioral approach taken here with an analysis of the effects of various institutional and/or process variables. It is quite important to know how much of the variability in state legislative decision-making is controlled by environmental and structural variables and how much is controlled by the types of individual role-orientations examined in this study.

Given the clear differences in role-orientations examined in this research, a second valuable step in legislative research would be to study the socialization processes by which role group members acquire the specific decision orientations which guide the approaches taken to their work. Two possible approaches to this research are suggested by our field experience. The first would be to study individual actors during the first year of their work in a particular role. Previous research and our own experience both suggest that the most dramatic shifts in orientation arise during this year.

A second possibility--which could be used separately or in combination with the first--would be to study, in detail, the unique role orientations of individuals who have held different legislative work roles. There are former staffers in the legislature, former legislators who are lobbyists, and of course, legislative leaders and fiscal committee members who have been members of policy committees. These individuals could give us valuable insights into the extent to which their role-orientations are produced by their specific legislative responsibilities and also into the mechanisms by which the new roles create new orientations.

A third area of study suggested by our research concerns the social networks which operate both to link legislatures across state boundaries and to transmit social science findings or innovative policy ideas from one group or legislature to another. We found extensive evidence that crucial legislative decisions are strongly influenced by the existence of social and political networks which operate both within each state and across state borders. Our hunch is that these social networks, more than published research or formal organizations of legislators or social scientists are the most effective mechanisms for bringing social science findings to bear on complex public policy issues.

A fourth area of study which our field experience indicates would contribute significantly to the ability to understand state legislative behavior is the relationship between legislative oversight and the re-articulation of major issues. Our experience suggests that legislative oversight, when effectively carried out, not only assesses the effectiveness and/or efficiency with which a particular legislative intention is being carried out, it also introduces legislators and their staff to unexpected insights into the nature of the policy problem itself. This means that those actively engaged in oversight activities find that they frequently change their own views about what legislative policy should be trying to accomplish as well as how it can best achieve those ends. Careful study of how, when, and why legislative oversight concerns and activities change a legislative actor's efforts to articulate and re-articulate major legislative issues would be immensely helpful in assisting legislatures to develop more effective policies.

Two areas which are much in need of developmental (as distinct from research) support in the immediate future are: 1) effective programs for legislative staff development and 2) improved systems of policy information retrieval and analysis. The expectations for staff to locate and properly interpret all kinds of complex data and research findings has been rising exponentially in recent years. Much can be done to assist staff consultants with timely and efficient access to needed information and with the development of the intellectual and personal skills required to analyze it effectively.

REFERENCES

Almond, Gabriel A. and G. Bingham Powell, Jr. (1966). Comparative Politics--A Developmental Approach. Boston: Little, Brown, and Company, 1966.

Bailey, Steven Kemp (1950). Congress Makes a Law--The Story behind the Full Employment Act of 1946. New York: Columbia University Press, 1950.

Bailey, Steven K. et al. (1962). Schoolmen and Politics. Syarcuse, New York: Syracuse University Press, 1962.

Barber, James D. The Lawmakers: Recruitment and Adaptation to Legislative Life (New Haven: Yale University Press, 1965).

Berger, Peter L. and Thomas Luckmann (1966). The Social Construction Reality (Garden City, New York: Doubleday, 1966).

Boulding, Kenneth Ewart (1966). The Impact of the Social Sciences. New Brunswick: Rutgers University Press, 1966.

Brady, David W. and Richard Murray (1975). "Reformers and Skeptics: Testing for the Effects of Apportionment Patterns on Policy Outputs," in Mathew Holden, Jr. and Dennis L. Dresang (eds.), What Government Does. Beverly Hills, California: Sage Publications, 1975, pp. 253-276.

Caplan, Nathan, Andrea Morrison and Russell J. Stambauch (1975). The Use of Social Science Knowledge in Policy Decisions at the National Level. Ann Arbor, Michigan: University of Michigan, 1975.

Cobb, Roger W. and Charles D. Elder (1972). Participation in American Politics: The Dynamics of Agenda Building. Boston: Allyn and Bacon, 1972.

Colley, William W. and Paul R. Lohnes (1962). Multivariate Procedures for the Behavioral Sciences. New York: John Wiley & Sons, Inc., 1962.

Congressional Research Service (1976). Legislative Oversight and Program Evaluation: A Seminar. Sponsored by the Congressional Research Service (Washington: U.S. Government Printing Office, 1976).

Crane, Wilder W. Jr. (1960). "A Test of Effectiveness of Interest-Group Pressures on Legislators." Southwestern Social Science Quarterly, 41 (December 1960), pp. 335-340.

Dawson, Richard and James Robinson (1963). "Inter-Party Competition, Economic Variables, and Welfare Policies in American States." Journal of Politics, vol. XXV, (May 1963), pp. 265-289.

Deckard, Barbara (1975). The Womens Movement. New York: Harper and Row, 1975.

______________ (1976). "Political Upheaval and Congressional Voting: The Effects of the 1960's on Voting Patterns in the House of Representatives." Journal of Politics 38:2 (1976), 326-345.

Diamond, Irene (1977). Sex Roles in the State House. New Haven, Conn.: Yale University Press, 1977.

Dye, Thomas R. (1966). Politics, Economics, and the Public: Policy Outcomes in the American States. Chicago: Rand McNally, 1966.

Easton, David (1965). A Systems Analysis of Political Life. New York: Wiley, 1965.

Erikson, R. S., N. R. Luttbeg, and W. V. Holloway (1975). "Knowing One's District--How Legislators Predict Referendum Voting." American Journal of Political Science, vol. 19, no. 2, 1975, pp. 231-246. (Florida State University, Tallahassee, Florida.)

Eulau, Heinz (1962). "Bases of Authority in Legislative Bodies: A Comparative Analysis." Administrative Science Quarterly, vol. 7, (December 1962), pp. 309-321.

Eulau, Heinz and Katherine Hinckly (1966). "Legislative Institutions and Proccess," in James A. Robinson (ed.), Political Science Annual I. Indianapolis, Indiana: Bobbs-Merrill, 1966, pp. 85-189.

Eulau, Heinz and Kenneth Prewitt (1973). Labyrinths of Democracy. Indianapolis: Bobbs-Merrill, 1973.

Fenno, Richard F. (1973). Congressmen in Committees. Boston: Little, Brown Company, 1973.

Ferguson, Leroy C. and Bernard W. Klein (1967). "An Attempt to Correlate the Voting Records of Legislators with Their Attitudes Toward Party." Public Opinion Quarterly, XXXXI (Fall 1967), pp. 422-426.

Force, George T. (1973). "Legislative Roles and Policy Behavior: An Empirical Inquiry." Ph.D. dissertation Southern Illinois University, 1973.

Francis, Wayne L. (1962). "Influence and Interaction in a State Legislative Body." American Political Science Review, LVI (December 1962), pp. 943-960.

Grumm, John G. (1970). "Structural Determinants of Legislative Output," in Allan Kornberg and Lloyd D. Musolf (eds.), Legislatures in Developmental Perspective. Durham, N.C.: Duke University Press, 1970, pp. 429-459.

Hedlund, Ronald D. (1975). "Perceptions of Decisional Referents in Legislative Decision Making." American Journal of Political Science, vol. 19, no. 3, 1975, pp. 527-542.

Holzner, Burkart (1968). Reality Construction in Society. Cambridge, Massachusetts: Schenkman Publishing Company, 1968.

Huckshorn, Robert J. (1965). "Decision-Making Stimuli in the State Legislative Process." Western Political Quarterly, 18 (March 1965), pp. 164-185.

Iannaccone, Laurence (1967). Politics in Education. New York: The Center for Applied Research in Education, 1967.

Jewell, Malcom E. (1970). "Attitudinal Determinants of Legislative Behavior: The Utility of Role Analysis," in Allan Kornberg and Lloyd D. Musolf (eds.), Legislatures in Developmental Perspective. Durham, North Carolina: Duke University Press, 1970, pp. 460-500.

Jones, Bryan D. (1973). "Competitiveness, Role Orientations, and Legislative Responsiveness." Journal of Politics 35 (1973), 924-947.

Jones, Charles O. (1976). "Policy Analysis: Academic Utility for Practical Rhetoric." Policy Studies Journal, vol. 4, no. 3, (Spring 1976), pp. 281-286.

Kirkpatrick, Jeane J. (1974). Political Woman. New York: Basic Books, 1974.

Kuhn, Thomas (1962). The Structure of Scientific Revolutions. Chicago: University of Chicago Press, 1962.

Lasswell, Harold Dwight (1936). Politics: Who Gets What, When, How. New York: P. Smith, 1936.

The Lawyer's Committee for Civil Rights Under Law (1975). A Compendium of State Legal Standards for the Provision of Public Education, 1974-75. Washington, D. C.: U.S. Government Printing Office, National Institute of Education, 1975.

LeBlanc, Hugh L. (1969). "Voting in State Senates: Party and Constituency Influences." Midwest Journal of Political Science 13 (February 1969), 33-57.

Lindblom, Charles (1968). The Policy-Making Process. Englewood Cliffs, New Jersey: Prentice-Hall, 1968.

Luce, Robert (1924). Legislative Assemblies. Boston: Houghton Mifflin Company, 1924.

Lutz, Donald S. and James R. Williams (1976). Minimum Coalitions in Legislatures: A Review of the Evidence (Beverly Hills, California: Sage Publications, 1976).

Mann, Dale (1975). Policy Decision-Making in Education. New York: Teachers College Press, 1975.

McCarthy, Leo (1979). Editorial in Los Angeles Times, January 14, 1979.

Mills, C. Wright (1956). The Power Elite. New York: Oxford University Press, 1956.

Milstein, Mike M. and Robert E. Jennings (1973). *Educational Policy-Making and the State Legislature: The New York Experience*. New York: Praeger Publishers, 1973.

Mitchell, Douglas E. (1978). *Expectation, Evaluation and Reward Systems in the Schools*. Prepared for the National Institute of Education's Conference on School Organization and Effects, January 1978.

Mitchell, Douglas E. and Larry W. Criswell (1977a). *Legislative Policy-Making in Three States*. Prepared for the Basic Skills Group of the National Institute of Education (October 1977).

Mitchell, Douglas E., Forest I. Harrison and Gary W. Badarak (1977b). *Social Science Impact on Legislative Policy: Theory and Research*. Prepared for the Basic Skills Group of the National Institute of Education (December 1977).

Mitchell, Douglas E. and William G. Spady (1977). "Authority and the Functional Structuring of Social Action in the Schools," unpublished manuscript (1977).

Nie, Norman H., Dale H. Bent, and C. Hadlai Hull (1970). *Statistical Package for the Social Sciences*. New York: McGraw-Hill, 1970.

Osgood, Charles E., George J. Suci and Percy H. Tannenbaum (1957). *The Measurement of Meaning*. Urbana: University of Illinois Press, 1957.

Patterson, Samuel C. (1962). "Dimensions of Voting Behavior in a One Party State Legislature." *Public Opinion Quarterly*, XXVI (Summer 1962), pp. 185-200.

Patterson, Samuel C., Ronald D. Hedlund, and G. Robert Boynton (1975). *Representatives and Represented*. New York: John Wiley, 1975.

Rich, Robert F. (1976). "Uses of Social Science Information by Federal Bureaucrats: Knowledge for Action vs. Knowledge for Understanding." Paper presented at Annual Meeting Midwest Political Science Association, Chicago, April, 1976.

Rosen, Corey Mitchell (1973). "Programmatic and Non-Programmatic Orientations in State Legislatures." Ph.D. dissertation: Cornell University, 1973.

Sorauf, Frank J. (1963). *Party and Representation: Legislative Politics in Pennsylvania*. New York: Atherton, 1963.

Spady, William G. and Douglas E. Mitchell (1977a). "Authority, Power and Expectations as Determinants of Action and Tension in School Organizations," unpublished manuscript (1977).

________________ (1977b). "The Uses of Authority and Power in the Organization and Control of School Task Performance," unpublished manuscript (1977).

________________ (1979). "Authority and the Management of Classroom Activity," Classroom Management: 1979. Chicago: National Society for the Study of Education, 1979.

Thomas, Norman C. (1975). Education in National Politics. New York: David McKay Company, 1975.

Wahlke, John C. (1970). "Policy Determinants and Legislative Decisions," in Sidney Ulmer (ed.), Political Decision-Making. New York: Van Nostrand Reinhold, 1970, pp. 76-120.

Wahlke, John C., Heinz Eulau, William Buchanan, and LeRoy C. Ferguson (1962). The Legislative System: Explorations in Legislative Behavior. New York: Wiley, 1962.

Weiss, Carol (1976). "Introduction by the Symposium Editor, The Research Utilization Quandary." Policy Studies Journal, vol. 4, no. 3, (Spring 1976), pp. 221-224.

Wirt, Fredrick M. (1977). "School Policy Culture and State Decentralization," in Jay D. Scribner (ed.), The Politics of Education. Chicago: The University of Chicago Press, 1977, pp. 164-187.

Worthley, John A. and Edgar G. Crane (1976). "Organizational Dimensions of State Legislatures." Midwest Review of Public Administration, vol. 10, no. 1, March 1976, pp. 14-30.

Zeigler, L. Harmon, M. Kent Jennings and G. Wayne Peak (1974). Governing American Schools: Political Interaction in Local School Districts. North Scituate, Massachusetts: Duxbury Pres, 1974.

APPENDIX A

COVER LETTER AND PROJECT ABSTRACT SENT TO THE YEAR I SAMPLE

UNIVERSITY OF CALIFORNIA, RIVERSIDE

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO   SANTA BARBARA • SANTA CRUZ

School of Education
Riverside, California 92521
(714) 787-5228

24 June 77

Dear

I am the Principal Investigator for a research project funded by the National Institute of Education concerning the use of social science research and evaluation information in the development of state level education legislation. We will be studying the development of legislation in three states: Oregon, California, and Arizona, over the next two years. (A brief summary of the project is attached.)

In order to get a general overview of educational policy issues and legislative responses to these issues in each of these states, we are making informal visits to each of the sample states- capitals and interviewing the key legislative actors--both members of the legislature and persons with a vital interest in the development of educational policy. It is obvious from both newspaper reports and conversations with other Arizona leaders that you have both a deep personal interest in Arizona's current educational policy problems and an important leadership role in the legislative process. It would be quite valuable to the development of our research project if a member of our staff could get an opportunity to chat with you about the development of educational policy in Arizona and to get your views on major legislative issues.

I will contact your office by phone next week to see if we can schedule an appointment which is convenient to both our schedules. Thanking you for your consideration in this matter, I remain,

Sincerely,

Douglas E. Mitchell
Assistant Professor

cld
Enclosure

--SUMMARY--

IMPROVING SOCIAL SCIENCE UTILIZATION IN LEGISLATIVE POLICY MAKING FOR BASIC SKILLS EDUCATION

October 1, 1976

Principal Investigator:

Douglas E. Mitchell
Department of Education
University of California, Riverside
(714) 787-3043

The University of California at Riverside has been awarded a contract by the National Institute of Education to conduct a two-year study of the impact of social science research and evaluation findings on the development of legislative policy in education. The research project will focus on three states: Arizona, California, and Oregon, and will closely examine the development of recent legislation in these sample states through the use of field interviews with key legislators, legislative staff members, educators, lobbyists, and executive branch personnel.

The Background of the Study

In the quarter of a century since the close of World War II there has been a tremendous growth in educational growth and development. Perhaps the most striking feature of the burgeoning research and development effort has been its failure to reduce uncertainty about how social policy might maximize educational achievement. In spite (or perhaps, because) of the national investment in gaining knowledge about educational processes and programs, it has become increasingly obvious that social science research does not easily influence social policy in any direct way. Until recently, this realization that the relationship between social science and social policy is confused and complicated, has generally lead to one of three conclusions: a) some observers believe that the problem is caused by the fact that social scientists are too much interested in esoteric, "ivory tower" theories rather than socially useful knowledge. b) A second group argues that the problem is with social policy makers who are too often dominated by narrow political interests and ignore important social science findings which do not support their interests. c) A third explanation focusses on problems related to communicating knowledge from social researchers to policy makers and stresses the misunderstanding, distortion, and oversimplification which results from efforts to interpret research and evaluation findings in the popular press.

Recently, however, there has been a renewed recognition of the importance of both personal and political values and the need for generalized interpretations of complex social problems in maintaining a democratic basis for governmental policy. This perspective sees social science as only one factor among others in the shaping of public policy. From this point of view, it becomes important to know how social science findings can become useful to social policy makers without displacing the influence of other important bases for policy decision.

At the present time, little is known about either: 1) the ways in which legislators actually encounter or use social science research and evaluation findings, or 2) the relationship between these encounters with social science findings and the other factors which contribute to legislative decision making. Therefore, the primary goal of this research project is to carefully examine available theoretical and empirical findings, and then design and implement needed field research so as to produce a more precise and substantial description of the actual utilization of social scientific inquiry by legislative policy makers. We expect to develop a comprehensive account of legislative policy making which will permit not only a full understanding of the existing patterns of social science utilization, but also an interpretive theory which will account for present limits on social science influence, and lay a proper basis for improving the usefulness of that influence.

The Conduct of the Research

The research will be conducted in four phases, lasting 25 months.

Products from three of the four phases will be expected to have significant value for a broad audience and will be prepared for wide dissemination. The first three phases of the study will be completed during the first year of the project. They are:

I. A review of the available research literature related to patterns of social science research and evaluation utilization in state legislation, the models of state legislative policy making, and the range of legislative alternatives for education policy.

II. A detailed description and analysis of the historical patterns of legislative policy making related to education in the three sample states, with special attention to the relationship between basic skills policy and other themes of legislative activity.

III. An open-ended hypothesis generating field study of the three sample state legislative policy systems. Data will be gathered from the principal policy makers in each state. Included will be contacts with legislators and legislative staff members, lobbyists, and executive branch personnel to discover their perceptions of the relationship between social science research and evaluation results and various educational policy issues.

The fourth phase of the study will take place during year two of the project. It is:

IV. A systematic and quantified study of the relationship between legislative policy and social science.

This study will be aimed at confirming the results of the preliminary field study conducted in phase III. Five broad clusters of variables have been identified as the initial framework for study in this fourth phase. These include: a) the structural and operational characteristics of the legislature, b) the activities of traditionally important policy influence interest groups, c) the types of resources for controlling schools utilized in legislative action, d) the social and ideological commitments of the legislators, and e) the interactive negotiation processes which characterize legislative enactment. This preliminary variable cluster will, of course, be refined and perhaps significantly altered as a result of the work done during the earlier phases of the research project.

Project Staff

The professional staff for the research will consist of Dr. Douglas E. Mitchell, Principal Investigator; Dr. Forest Harrison, Co-Investigator; and Dr. Laurance Iannaccone, Consultant. Dr. Mitchell is an Assistant Professor of Education at the University of California, Riverside. He has a Ph.D. in Political Science, and has taught and done research in educational politics and policy. Dr. Harrison is Associate Professor of Education and Economics, and Chairman of the program in Public Policy Study at Claremont Graduate School. Dr. Iannaccone is Professor of Education at the University of California, Santa Barbara.

APPENDIX B

COVER LETTER FOR YEAR II PARTICIPANTS NOT INTERVIEWED DURING YEAR I

UNIVERSITY OF CALIFORNIA, RIVERSIDE

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO SANTA BARBARA • SANTA CRUZ

SCHOOL OF EDUCATION
RIVERSIDE, CALIFORNIA

May 22, 1978

Dear

The purpose of this letter is to inform you of an important study of the role of social science findings in state legislative policy formation and to seek your cooperation in its completion.

In October 1976, the National Institute of Education, believing that a better understanding of the relationship between social science and public policy is greatly needed, made a two-year grant to the University of California, Riverside, to undertake systematic study in the three states of Arizona, California and Oregon. During the first year of this study, we conducted a wide-ranging search of prior efforts to interpret the utilization of social science in state legislatures and conducted a number of exploratory interviews with legislators, staff members, lobbyists, executive branch officials, and other persons vitally interested in the development of legislation. Work during this first year has led to two major reports (a summary of which is enclosed for your information).

During the next few weeks we will be gathering the necessary data to complete this study. We hope to secure from you (and about 175 other key actors) systematic and comparable information regarding the relationship between social science findings and other factors which guide and support legislative policy-making. In order for our information to give us an adequate basis for comparing policy-making within the three states under study, we would like to make three requests of you:

1. Would you consent to a tape-recorded interview of approximately 30 to 40 minutes in length covering the following topics: a) recent developments in legislative activity related to

b) how these issues have been defined and/or resolved; and
c) why certain definitions or statute proposals dominate?

2. If you consent to an interview, would you provide us with biographic information of the sort usually found on a professional resume?

3. Would you also take approximately 10 minutes to check a Rating Scale indicating your views on the importance of various decision-making resources?

We will contact you by phone during the next few days to arrange a mutually convenient time and place for an interview. I do hope you will be willing to cooperate as your assistance is essential if we are to build an accurate and comprehensive picture of social science utilization.

Most sincerely yours,

Douglas E. Mitchell
Assistant Professor
School of Education

Gary W. Badarak
Research Assistant
School of Education

sam
Enclosure

APPENDIX C

COVER LETTER FOR YEAR II PARTICIPANTS PREVIOUSLY INTERVIEWED DURING YEAR I

UNIVERSITY OF CALIFORNIA, RIVERSIDE

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO SANTA BARBARA • SANTA CRUZ

SCHOOL OF EDUCATION
RIVERSIDE, CALIFORNIA

May 22, 1978

Dear

As you may recall, last year a member of our research team informally interviewed you as part of a study of the role of social science in state legislative policy formation. The purpose of this letter is to inform you of the progress of this study and seek your cooperation in its completion.

The project, you may remember, is sponsored by the National Institute of Education. Believing that a better understanding of the relationship between social science and public policy is greatly needed, NIE made a two-year grant to the University of California, Riverside, to undertake this systematic study in the three states of Arizona, California and Oregon. With your help and an extensive review of prior efforts to interpret the utilization of social science by state legislatures, our work during this first year led to two major reports (a brief summary of which is enclosed for your information).

During the next few weeks we will be gathering the necessary data to complete this study. We hope to secure from you (and about 175 other key actors) systematic and comparable information regarding the relationship between social science findings and other factors which guide and support legislative policy-making. In order for our information to give us an adequate basis for comparing policy-making within the three states under study, we would like to make three requests of you:

1. Would you consent to a tape-recorded interview of approximately 30 to 40 minutes in length covering the following topics:
   a) recent developments in legislative activity related to

b) how these issues have been defined and/or resolved; and
c) why certain definitions or statute proposals dominate?

2. If you consent to an interview, would you provide us with biographic information of the sort usually found on a professional resume?

3. Would you also take approximately 10 minutes to check a Rating Scale indicating your views on the importance of various decision-making resources?

We will contact you by phone during the next few days to arrange a mutually convenient time and place for an interview. I do hope you will be willing to cooperate as your assistance is essential if we are to build an accurate and comprehensive picture of social science utilization.

Most sincerely yours,

Douglas E. Mitchell
Assistant Professor
School of Education

Tedi K. Mitchell
Research Associate

sam
Enclosure

APPENDIX D

SUMMARY OF YEAR I WORK
ENCLOSED WITH REQUESTS
FOR YEAR II
INTERVIEWS

SOCIAL SCIENCE UTILIZATION IN STATE LEGISLATURES:
A Brief Summary of Recent Research

Douglas E. Mitchell
University of California, Riverside

In October, 1976, the National Institute of Education funded a two-year study of social science utilization by state legislatures (Grant #NIE-G-76-0104). This report is a brief summary of the results of work completed during Year I of that research project.* The summary is based on data gathered from reviewing more than a thousand books, monographs and journal articles on state legislative policy-making and social science utilization and from interviewing about 90 legislative actors in Arizona, California and Oregon.

This preliminary work strongly suggests that in addition to the availability of relevant, high-quality research reports two key factors affect the utilization of social science research and evaluation findings in the development and resolution of legislative issues. The first element is the orientation of legislative actors toward their work. Individual legislators, staff members, or lobbyists approach legislative issues in different ways, and some approaches rely more heavily on the types of information provided by social science findings than do others. The second key element is the location or stage in the legislative process at which an issue is being addressed. Legislation generally begins with diffuse political pressures or interests which are only gradually given specific form through the processes of bill authority, committee hearings and finally voting. The potential utility of social science varies greatly as issues pass from one stage to the next within the legislative process.

---

*This brief summary is based on two comprehensive reports which provide a fuller account of the Year I findings. A limited number of these reports: "Social Science Impact on Legislative Policy: Theory and Research" and "Legislative Policy-Making in Three States" are available from the principal investigator: Dr. Douglas E. Mitchell, School of Education, University of California, Riverside, California 92521.

The effects of legislative actor orientations and legislative process stages are further enhanced by three other important factors. These are: 1) the emergence of a billion dollar social science research and development industry which provides the materials to be used, 2) the changing character of state legislatures which has affected the motivation or inclination to use research findings in legislative decision-making, and 3) significant growth in the professional staff structures within the legislatures which serve as mediating or linking agents connecting the producers of research with those who might utilize it.

Each of these five factors is briefly reviewed in the remainder of this report.

Orientations to Legislative Decision-Making

Decision-making is the most important process in the formation of legislative policy. A review of the research on legislative decision-making quickly reveals that legislators differ significantly in their approaches to decisions. These differences in approach or orientation arise because legislators rely on different principles or sources of guidance in making their decisions. Depending on the particular legislative issue being decided, and on a wide range of other factors, legislators may rely on the expressed desires of their constituents, the advice of staff experts, the leadership of their political party, more knowledgeable colleagues, their moral convictions, the arguments of outside experts or interest groups, or other sources of guidance and direction. One major purpose of the Year II work in this research is to determine whether differences in individual orientations play an important part in the extent to which social science is used by state legislatures.

Stages in Legislative Policy-Making

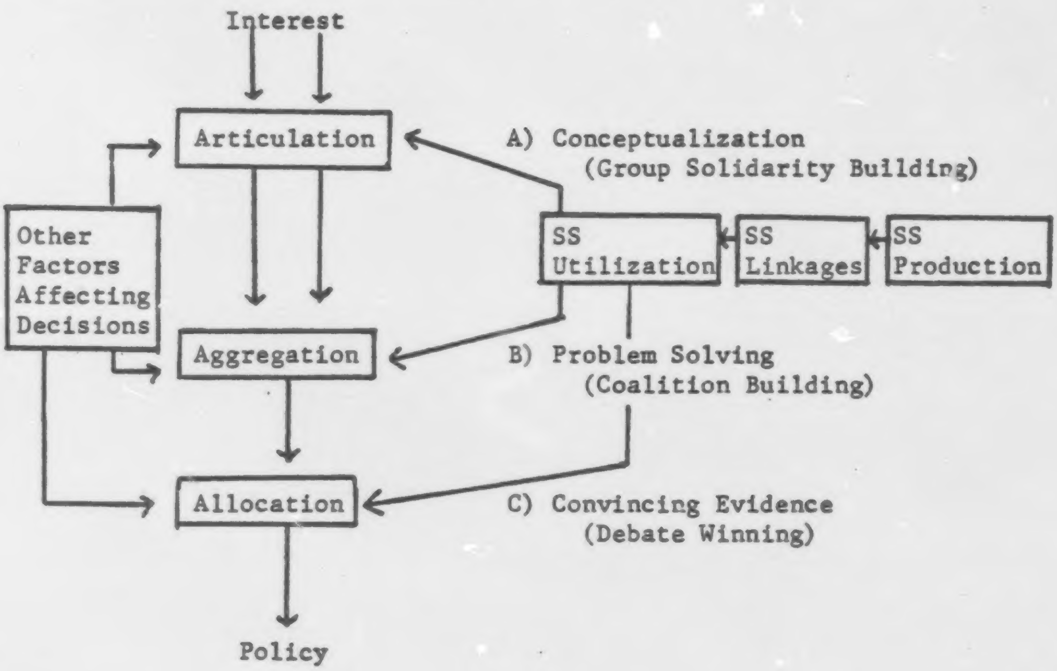
The second important factor affecting social science impact on legislative policy formulation is the question of where a given policy may be in its development.

All public policy has its beginning as a matter of political interest. From a boiling caldron of competing interests vying for attention, the legislative process must isolate some which will be given explicit consideration. In the articulation of these interests, the first stage of policy development, social science has been found to provide guidance to policy makers by offering a source of definition or conceptualization of social problems. That is, utilization of science in the articulation of interests means framing and expressing one's interests in terms of scientific theories or explanations of the policy problems at hand and presenting policy demands in the form of demands for rational action to alleviate the problems so defined.

Once interests have been articulated into specific legislative issues and proposals, the legislative system begins the complex process of sorting proposals, assigning priorities, combining similar purposes and reformulating submitted bills into final form for decision-making. This second stage, interest aggregation, occurs primarily in committee hearings, where approval, amendment or rejection of the bills orginally entered onto the legislative calendar is developed. Social science utilization at this stage is a matter of problem solving in which scientific findings may contribute to the basis for decision-making if they can provide timely, clear and unequivocal statements about the likely consequences of choosing one policy over another.

Emerging from the committee process are final legislative proposals to be sent to the floor for ultimate desposition through roll call voting. At this third stage, which could be called the interest allocation stage, social science contributions to decision-making consist of providing convincing evidence regarding just which interests will be served and which will be thwarted if a proposed statute is adopted. Assessed within a framework of political interests, scientific information can assist a policy maker in understanding the consequences of proposed policies, and in recognizing how these consequences affect the vital interests of constituents, the public and other reference groups. Figure 1 graphically depicts the legislative process and the contributions made by social science research and evaluation findings within it.

Figure 1 Social Science Links to Legislative Policy-Making


Interest
Articulation
A) Conceptualization
(Group Solidarity Building)
Other Factors Affecting Decisions
SS Utilization
SS Linkages
SS Production
Aggregation
B) Problem Solving
(Coalition Building)
Allocation
C) Convincing Evidence
(Debate Winning)
Policy

Emerging Social Science Research and Evaluation Industry

Although precise figures on the current size of the social research and development industry are difficult to locate, the three decades following World War II have seen the development of a sizeable industry. At a minimum, figures from the National Science Foundation place the value of R&D in the social and psychological sciences at $374 million in Fiscal Year 1975 and $493 million in Fiscal Year 1976. General Accounting Office figures for the same period suggest that over $1.6 billion was spent pursuing social research and development.

Two major problems related to this burgeoning social science industry have received considerable attention in recent years. The first of these has to do with the usefulness of research results. The usefulness controversy has centered on whether or not research and evaluation results are beneficial to those making policy decisions. Considerable disappointment has been voiced by both policy makers and scientists. Typically, scientific researchers have claimed that policy makers are not sufficiently interested in scientific research findings while policy makers have claimed that the scientists are unresponsive to immediate policy needs.

A second problem has to do with the organization of the research industry and its linkage to policy makers. The relationship of the social scientist to policy maker has varied from that of social critic to intimate advisor or policy legitimator. When, where and how social science results can or should be made available to policy makers has been the subject of intense speculation, although not very close study, during most of the 60's and 70's.

The history of social science utilization spans more than 120 years and falls into five developmental periods. During each of these periods the size of the social research and development effort has expanded both in terms of dollar volume and by becoming more institutionalized. Most recently, there has been a shift in the philosophy of the coordinating and funding institutions which support social research and development from an emphasis on science-supporting to one of policy-problem solving. This has transformed many research institutions into agencies devoted largely to the mobilization of scientific policy research and the dissemination of research funding to policy maker. This shift in the function of the science supporting institutions has been accompanied by: 1) a shift from grants to contracts as the basic mechanism for funding research, 2) a shift in emphasis from basic to applied research, 3) the emergence of program evaluation as a major social research activity, 4) the establishment of large scale social experimentation in areas dealing with housing, income and education, and 5) a substantial shift in the allocation of research funds from universities to entrepreneurial research corporation.

Recent Changes in the Typical Legislator

Both at the federal and state levels the personal characteristics of legislators have been changing and have resulted in significant impact on the internal procedures of the legislatures and the resulting legislation. Legislative reapportionments mandated by the Supreme Court are probably the most important factor responsible for these changes. Other factors, however, include the political activism of new groups in the 1960's, political reform legislation, increasing complexity of social problems, and perhaps a recently emergent fiscal conservatism in government. Two terms capture the character and tone of these recent changes: democratization and professionalization.

The increasing democratization of legislative bodies in the United States has opened up legislative service to a number of groups previously unseen in public government. Minorities, especially women, have increased their numbers due to the reapportionment of legislative bodies in the last decade. Occupations claimed by legislators have also changed during this period resulting in the increased participation by those claiming to be educations and the decreased participation by those trained as lawyers.

State and national legislators are increasingly coming to view themselves as professionals. More elected officials are serving for longer periods of time and those individuals, in general, tend to seek re-election more often than before. Salaries for state legislators have, in general, increased and in some states have offered some incentive for legislators to devote all of their time to the business of legislating. Coupled with the desire to act as effective policy makers, these individuals have affected procedural changes in the legislative chambers and have pursued legislative programs from a comprehensive framework.

Increasing Legislative Staff Capacity

Beyond substantial growth in the social science research and evaluation industry and changes in the character of legislators themselves, perhaps the most important factor affecting the utilization of social science in legislative policy-making is the rapidly evolving professional staff structures which support the work of the state legislatures in every state. Over the years the addition of new legislative staff has produced an increase not only in the size and sophistication of established staff units, but also has involved the addition of new functional staff responsibilities. The most recent staff additions involve the establishment of diversified staff units employing subject matter specialists.

Although there are great variations in the amount and kind of staffing available to legislatures in different states, one fact is obvious: there has been a dramatic increase across all fifty states in the number of professional staff made available to the legislature. Functionally, the growth and number of legislative staff offices devoted to research, policy analysis, and evaluation have expanded at an increasing rate since the 1950's when attention was focused on the state legislatures in an effort to reform their structure, operations and political effectiveness.

The presence in the legislature of staff people trained as experts in subject matter areas gives them the opportunity to effectively link the producers of social science research to the policy-making arena through gathering, analyzing, and summarizing research and evaluation findings which bear on legislative issues as they develop.

APPENDIX E

YEAR II INTERVIEW SCHEDULE

AND

NOTE FORM

INTERVIEW SCHEDULE

I. Introduction Statement

* As you may or may not recall:
  1) NIE Report
  2) Purpose: Role of social science in educational policy-making
  3) To do so we need to understand:
    a. Issue development
    b. Ways legislature works to define and resolve

* Before we begin there are a few things about the nature of our interview that need to be mentioned.
  1) like to record in order to study different groups of people on how they address these issues
  2) Strictly confidential
  3) Use information only if information is corroborated
  4) Also like to get you to
    a. brief instrument on resources
    b. biographical
  5) You have been selected because ___________

---Turn tape recorder on

II. Issue Development

A. How has the ____________ issue been developing?
  1. Specific actions or proposal/when were they taken?

1	2	3

(See interview note form)

  2. Who are the key actors? (Role played) (Inside/Outside)
  3. What role did (do) you play?

B. What are the major factors which must be considered when dealing with this issue?
  1. Alternative approaches or conception of the problem.
  2. Your sense of the right way to see the issue and the reasoning for your perspective.
  3. What is/are the problem(s) that seem to need resolution?
  4. How has this issue changed over time?

C. How does the legislature tackle this issue?
  1. Is this issue handled like other issues?
  2. What have been the important factors governing legislative action?
  3. How has the issue been affected by:
    a. values or ideologies
    b. information
    c. personal influence/relationships
    d. prior laws/constitutional constraints
  4. What sort of resources would be helpful in further legislative actions?
    i.e. -- leadership, commitment, and better new information

* Differences between substantive committees and the fiscal committee.

INTERVIEW NOTE FORM

NAME: ____________________________________

I. Specific Actions or Proposals Taken

1	2	3

Serial Number for Survey Instrument ______________

II. Follow up Work Needed

III. Summary of Impressions

APPENDIX F

BIOGRAPHICAL DATA FORM

BIOGRAPHIC DATA FORM

I. General Information

NAME: ______________________________

SEX: __________ BIRTHDATE: __________

BIRTH PLACE: ______________________________

EDUCATION:

Highest Level: (Check appropriate space)

- ______ High School
- ______ Some College
- ______ A.A.
- ______ B.S. or B.A.
- ______ M.S. or M.A.
- ______ Doctorate
- ______ Professional Degree

Professional License(s) or Certificate(s)

____

____

____

____

____

Major Field:

Undergraduate: ______________________

Graduate: ______________________

Political Party Affiliation: ______________

Political Orientation: (Please circle one)

1) Strongly Cons. 2) Cons. 3) Mod. 4) Lib. 5) Strongly Lib.

Military Service: ____ Yes

____ No

Rank at Discharge: ____

____

II. Legislator Information (For Legislators Only)

Length of Residence in State: ______________

Length of Residence in District: ______________

Occupation: ______________________

Political Experience

First Elected Public Office: ______________ Date: ______

Other Elected Offices, if any: ______________

____

____

Total Years of Elected Office Experience: ______________

Total Years in Legislature: ______________

Total Years in Current Chamber: ______________

Current Committee Assignments: ____________

Years on Education Committee: ____________
Years on Fiscal Committee: ____________

Committee Chairmanships: ____________ Date: ______
Other Legislative Leadership Positions: ____________ Date: ______

III. Staff Information (For Executive Branch and Legislative Staff)

Job Title: ____________
Length of Time at Present Job: ____________
Previous Positions: ____________ Where: ____________

Other Occupations, if any: ____________

Political Activity

Elected Political Offices Held: ____________
Have You Campaigned for a Public Office: ____________
Do You Plan to Run for Office: ____________

IV. Lobbyist and Interest Group Information

Organization You Represent: ____________
Is it a full-time job: ______ Yes ______ No
If not, approximately how many hours per week does it consume: ____________
Do you receive a salary for your service: ______ Yes ______ No

Other Occupation, if any: ____________

Prior Occupation: ____________

Other Organization Represented: ____________

Political Experience: ____________

APPENDIX G

LEGISLATIVE DECISION-MAKING
RESOURCE RATING SCALE

LEGISLATIVE DECISION-MAKING

RESOURCE RATING SCALE

On the attached sheets are presented several terms referring to potential sources of information and guidance for decision-making on legislative issues. They are arranged in pairs, separated by a line divided into spaces. Would you please indicate which of these potential sources of assistance you feel are the most valuable and important for defining and resolving issues before the legislature. Indicate your feelings by placing an "x" on the line to indicate which element in each pair of resources is the more critical. Mark the space closest to the end of the line if one element is much more important than the other; mark the space closer to the center of the line if an element is only somewhat more important or useful.

(In some pairs, both items may seem important, while for others both may seem trivial. Please try to give a comparative estimate for each pair, however. Your overall views will become clear when we aggregate your answers for all items.)

Since the importance of resources for decision may vary from one issue to another, would you please fill out one copy of the rating scale for each of the issues discussed in our interview.

YOU HAVE DISCUSSED ISSUES RELATED TO ______________________________ AS THEY HAVE DEVELOPED IN THIS STATE. WOULD YOU PROVIDE US WITH YOUR OWN ASSESSMENT OF THE RELATIVE IMPORTANCE OF EACH RESOURCE LISTED BELOW IN GUIDING THE DEFINITION AND RESOLUTION OF THESE ISSUES.

Insight provided by interest group lobbyists	_______:_______:_______:_______	Negotiations among legislators
Reaching legislative consensus through study and discussion	_______:_______:_______:_______	Balancing budget demands of various groups
Deliberations within the legislative committees	_______:_______:_______:_______	Support from influential groups
Maintaining established legal principles	_______:_______:_______:_______	Developing mutual interests through close working relationships
Giving priorities to important goals	_______:_______:_______:_______	Discussions with friends or colleagues
Reaching consensus among interested parties	_______:_______:_______:_______	Adopting a reasonable policy
Technical adequacy of proposals	_______:_______:_______:_______	Giving priorities to important goals
Support from influential groups	_______:_______:_______:_______	Interpretations provided by executive agencies
Understanding constituency interests	_______:_______:_______:_______	Balancing budget demands of various groups
Giving priorities to important goals	_______:_______:_______:_______	Providing for orderly and manageable change
Providing for orderly and manageable change	_______:_______:_______:_______	Technical adequacy of proposals
Knowing what effects a law will have	_______:_______:_______:_______	Being committed to basic values

Pressure from the governor's office	______:______:______:______	Relying on adequate staff work
Discussions with friends or colleagues	______:______:______:______	Providing for orderly and manageable change
Consistency with existing law and practice	______:______:______:______	Listening to those with expert knowledge
Being committed to basic values	______:______:______:______	Developing mutual interests through close working relationships
Reaching political accommodation through compromise	______:______:______:______	Understanding constituency interests
Reaching legislative consensus through study and discussion	______:______:______:______	Understanding constituency interests
Legislative leadership priorities	______:______:______:______	Deliberation within the legislative committees
Negotiations among legislators	______:______:______:______	Pressure from the governor's office
Interaction among legislators	______:______:______:______	Interaction with constituents and interest groups
Concern with the public good	______:______:______:______	Listening to those with expert knowledge
Consulting with prominent and influential people	______:______:______:______	Consistency with existing law and procedures
Technical adequacy of proposals	______:______:______:______	Discussions with friends and colleagues
Interpretations provided by executive agencies	______:______:______:______	Legislative leadership priorities
Consistency with existing laws and procedures	______:______:______:______	Concern for the public good
Legislative leadership priorities	______:______:______:______	Support from influential groups

Listening to those with expert knowledge	_______:_______:_______:_______	Consulting with prominent and influential people
Reaching legislative consensus through study and discussion	_______:_______:_______:_______	Reaching political accommodation through compromise
Maintaining established legal principles	_______:_______:_______:_______	Being committed to basic values
Legislative factors	_______:_______:_______:_______	Legitimate public interests
Balancing budget demands of various groups	_______:_______:_______:_______	Reaching political accommodation through compromise
Vigorous public leadership	_______:_______:_______:_______	Behind the scenes work
Insight provided by interest group lobbyists	_______:_______:_______:_______	Pressure from the governor's office
Analysis of the issues	_______:_______:_______:_______	Achieving a politically acceptable solution
Technical considerations	_______:_______:_______:_______	Political considerations
Knowing what effects a law will have	_______:_______:_______:_______	Maintaining established legal principles
Relying on adequate staff work	_______:_______:_______:_______	Insight provided by interest group lobbyists
Consulting with prominent and influential people	_______:_______:_______:_______	Concern for the public good
Relying on adequate staff work	_______:_______:_______:_______	Negotiations among legislators
Developing mutual interests through close working relationships	_______:_______:_______:_______	Knowing what effects a law will have
Deliberation within the legislative committees	_______:_______:_______:_______	Interpretations provided by executive agencies